

Louisiana Department of Environmental Quality

FY 2000 Quality Management Plan

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QUALITY MANAGEMENT PLAN

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MISSION, GUIDING PRINCIPLES, AND GOALS

Mission

The mission of the Department of Environmental Quality (LDEQ) is to provide service to the people of Louisiana through comprehensive environmental protection in order to promote and protect health, safety and welfare while considering sound policies regarding employment and economic development.

Philosophy

- LDEQ is an assertive proponent of a clean and healthy environment, accomplishing its mission through regulatory and non-regulatory means to achieve a balance that sacrifices neither economic growth nor environmental protection.
- Decisions made by LDEQ will be open, fair, consistent and based on comprehensive scientific information applied in accordance with the law.
- LDEQ will strive to improve the cooperative working relationship between LDEQ and EPA.
- LDEQ will encourage stakeholder and public participation in consideration of environmental issues.
- LDEQ will emphasize and support innovative and effective programs including but not limited to Pollution Prevention, waste minimization, recycling and regulatory flexibility.
- LDEQ will promote environmental awareness through education.
- LDEQ supports enhanced customer service, outreach and small business assistance.

Goals (Six Long-term Goals identified in the Strategic Plan)

- LDEQ will protect public safety, health and welfare by protecting and improving the environment (land, water, and air).
- LDEQ will increase compliance with environmental law (both voluntary and mandatory compliance) that meet state and federal mandates.
- LDEQ will operate in an efficient and effective manner.
- LDEQ will, to the maximum extent possible, conduct programs that are consistent with sound policy for employment and economic development.
- LDEQ will work to enhance customer service.
- LDEQ will work to provide regulatory flexibility.

INTRODUCTION

Quality assurance (QA) may be defined as:

An integrated system of management activities involving planning, implementation, assessment, reporting, and quality improvement to ensure that a process, item, or service is of the type and quality needed and expected by the customer (ANSI/ASQC E4-1994).

This Quality Management Plan (QMP) describes the quality system implemented by the Louisiana Department of Environmental Quality (LDEQ) for activities related to the collection, analysis, and use of environmental data. The QMP is intended to document, for LDEQ personnel and others, how the system is structured and implemented and to provide a consistent framework for continuing improvement.

The QMP contains 10 sections organized to parallel federal guidelines and national standards for quality assurance:

- | | |
|---|-------------------------------------|
| 1. Management and Organization | 6. Computer Hardware and Software |
| 2. Quality Assurance System and Description | 7. Planning |
| 3. Personnel Qualifications and Training | 8. Implementation of Work Processes |
| 4. Procurement of Items and Services | 9. Assessment and Response |
| 5. Documents and Records | 10. Quality Improvement |

For additional information concerning this Quality Management Plan or other aspects of the LDEQ's quality system, please contact:

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1.0 MANAGEMENT AND ORGANIZATION

Quality in environmental programs contributes to public health and safety, economic development, efficient use of public monies, technical credibility, and recognition of excellence. The achievement of quality in environmental programs is the responsibility of each employee of the Louisiana Department of Environmental Quality (LDEQ).

1.1 APPLICABILITY

This plan is intended to meet all applicable regulatory requirements concerning quality assurance. Activities governed by this QMP include environmental data operations, characterization of environmental processes and conditions, design and construction of engineered environmental systems, environmental monitoring, and laboratory analyses. Agency offices and staff and external contractors are bound by the requirements delineated in this QMP. Environmental programs governed by this QMP are listed in Appendix A.

1.2 DEQ ORGANIZATION AND MISSION

The LDEQ is a regulatory agency of the State of Louisiana. All regulations must follow promulgation procedures outlined by the Administrative Procedures Act. Day-to-day operations of LDEQ are delegated to the Secretary of LDEQ who is appointed by the Governor.

The LDEQ consists of five offices: Office of the Secretary, Office of Management and Finance, Office of Environmental Compliance, Office of Environmental Services, and Office of Environmental Assessment (Appendix B and C). The LDEQ executive staff within each office has assigned authority for environmental grants, programs, and projects to supervisors and managers, and has designated quality assurance staff for each office.

1.3 RESPONSIBILITIES AND AUTHORITIES

The responsibilities of the five offices and their divisions are described in Appendix B. Appendix B also includes organizational charts of the offices that show the locations of the quality assurance staff. Descriptions of personnel responsibilities are contained in Appendix C.

1.4 QUALITY ASSURANCE ORGANIZATION

The LDEQ QMP requires each of the five offices and the divisions within each office to implement the quality assurance program as described in this QMP. The quality assurance manager (QAM) directs the quality assurance activities and the

QA team (QAT). The QAT is composed of the QA Officers and the QAM. The QAT has sufficient access and authority to coordinate development and implementation of the agency quality assurance program. The QAT has access to all work areas and sufficient authority to identify, initiate, recommend, and provide solutions to quality problems and to verify the implementation of solutions to problems. The QA Officer for each Office, along with managers, supervisors, and quality assurance coordinators within each Division, are responsible for their respective quality assurance activities.

1.5 Quality Assurance Dispute Resolution Process

Disputes concerning Quality Assurance issues shall be managed as follows:

- **Intra-Office QA disputes:** The QAO for each office, with concurrence from the Assistant Secretary, shall attempt to resolve the dispute. If the QAO is unable to resolve the dispute, the QAO shall refer the matter to the Quality Assurance Manager, who shall resolve the dispute.
- **Cross-Office QA disputes:** Some QA issues may involve the missions and operations of more than one office. In the event of such a dispute, the QAOs for the affected offices shall attempt to resolve the dispute. If the QAOs are unable to resolve the dispute, the matter shall be referred to the Quality Assurance Manager, who shall resolve the dispute.
- **Documentation and procedures:** Department-wide consistency with the objectives and procedures of the QMP shall be considered in all cases of dispute resolution.
- **Minor Issues:** Disputes resolved by means of guidance and direction by the QAOs require no special documentation, unless they are of a recurring nature. For issues of a recurring nature, the QAO(s) should consider measures to prevent recurrence, e.g., training, clarification of QA documentation, etc. and should document any proposed corrective or preventive measures to the QAM.
- **Significant Issues:** Disputes involving nonconformance with the QMP, and those referred to the QAM shall be documented. In seeking resolution and/or corrective action, the QAM shall consult with the QAOs, and may consult with the executive staff as appropriate. The QAM shall document the resolution of the issue, including any recommendations for corrective action, and shall request a follow-up report on the implementation of resolution and/or corrective action.

1.6 COMMUNICATION AND IMPLEMENTATION

The QA Manager and the executive staff ensures the agency quality system is understood and effectively implemented through program planning activities, the implementation of organizational and project-specific management controls, employee training programs, and ongoing assessment and quality improvement activities. These activities, programs, and controls are described in this QMP.

1.7 ANNUAL REPORTS

The quality assurance manager and quality assurance team provides executive management with annual reports (by 12/31 each year) concerning the effectiveness of the quality system and the adequacy of resources associated with the achievement of quality. Executive staff reviews the reports to determine if agency quality assurance goals are being met and recommend revisions where needed.

1.8 RESOURCES

The Secretary and executive staff will ensure that resources are adequate (i. e., meet customer needs and expectations) to achieve and maintain quality in environmental programs. Resource allocations for quality assurance and quality control activities, including resources allocated to quality assurance programs and personnel, are determined on an annual basis at the agency, office, and division levels and are adjusted as necessary to achieve programmatic objectives.

2.0 QUALITY ASSURANCE SYSTEM AND DESCRIPTION

A quality system provides the framework for planning, implementing, and assessing work performed by an organization and for carrying out the required quality assurance and quality control. The LDEQ has implemented a quality system designed to ensure that environmental programs produce the necessary type and quality of results.

2.1 QUALITY SYSTEM COMPONENTS

The principal components of the LDEQ quality system include planning, implementation and assessment.

2.1.1 PLANNING

The systematic planning tools are:

- quality management plan (QMP);
- quality assurance project plans (QAPPs);
- sampling and analysis plans;
- environmental management plan (EMP); and
- strategic and operational plans.

2.1.1.1 Quality Management Plan

The QMP is a formal document that describes the quality system in terms of the organizational structure, functional responsibilities of management and staff, lines of authority, and required interfaces for those planning, implementing, and assessing all activities conducted. LDEQ will utilize this QMP to plan, implement, and assess the effectiveness of the department's environmental programs.

2.1.1.2 Quality Assurance Project Plans

QAPPs document how quality assurance and quality control activities will be implemented during the life cycle of a program, project, or task for collection of environmental data. QAPPs may be generic for an entire program or specific for each project. The Data Quality Objective (DQO) process described by EPA may be used as a tool in the development of QAPPs to identify specific details about data users and uses that will be incorporated into the QAPP. References for QAPP and DQO development are listed in Appendix E.

2.1.1.3 Sampling and Analysis Plans

These plans provide specific details for individual environmental monitoring events not included in the QAPP, including but not limited to site location, sampling protocol, equipment, personnel, resources and schedules.

2.1.1.4 Environmental Management Plan (EMP)

The EMP describes the organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving and maintaining environmental policy required to achieve and maintain ISO 14001 registration.

2.1.1.5 Strategic and Operational Plans

The Department's strategic plan is a 5 year plan for self-assessment, goal and objective setting, and strategy building that considers the Department's purpose, capacities, and operating environment. The operational plan is developed annually to identify strategic plan objectives and indicators used to establish the department's operating budget.

2.1.2 IMPLEMENTATION

Implementation will be conducted through standard operating procedures (SOPs). SOPs are used to implement quality control requirements stated in the QAPPs. Standard Operating Procedures are developed, reviewed annually and revised as needed. Please refer to section 5 for more information relative to development of SOPs.

2.1.3 ASSESSMENT

The following assessment elements will be used by the LDEQ:

- management system reviews (MSR);
- technical assessments; and
- data quality assessments.

2.1.3.1 Management System Reviews

To assess the effectiveness and the implementation of the quality system (QMP), Management System Reviews (MSRs) will be conducted. The MSR may be a self-assessment or conducted by an EPA Region 6 Quality Assurance Team.

The Quality Assurance Manager and Quality Assurance Team will conduct MSRs of the offices on a rotational basis with each office being assessed at least once every five years. The findings of the MSR will be reported to the Secretary and the Assistant Secretary of the office being assessed.

2.1.3.2 Technical Assessments

Program activities will be evaluated through technical assessments and audits based on QAPPs, SOPs, and Sampling and Analysis Plans. The frequency of technical assessments are project specific and defined in the individual plans and SOPs. (Please refer to section 9.1.)

2.1.3.3 Data Quality Assessments

All data will be evaluated for quality and integrity. Data quality assessment procedures for each program are detailed in the specific QAPPs and SOPs for that program. Various guidance documents are available to assist in determining appropriate data assessments and determining the usability of data including EPA quality system documents QA/G-4, A/G-4HW, QA/G-7, QA/G-9, EPA Contract Laboratory Program (CLP) guidelines and EPA Risk Assessment Guidelines. References are provided in Appendix E.

2.1.3.4 Performance Planning and Reviews

Performance planning and reviews (PPRs) are conducted annually by immediate supervisors for each employee, following the procedures established for PPRs in Chapter 10 of the Louisiana Civil Service Rules. Quality assurance expectations are explained to each employee during the planning meetings and evaluated annually.

3.0 PERSONNEL QUALIFICATIONS AND TRAINING

LDEQ personnel performing work in environmental programs shall be qualified to perform assigned work. Initial and ongoing personnel qualifications shall be determined, training needs shall be identified, access to appropriate training opportunities shall be provided, and the acquisition of needed knowledge and skills shall be verified.

3.1 POSITION DESCRIPTIONS

Job descriptions are prepared for each LDEQ position. Environmental Scientists are on a Master Job Description. The job descriptions specify essential job functions, physical and environmental demands and hazards, and job-related knowledge and skills. Performance Planning and Reviews (PPRs) are conducted annually by immediate supervisors following the procedures established for PPRs in Chapter 10 of the Louisiana Civil Service Rules. The Human Resources Section maintains job descriptions and original signed PPRs. The performance planning documents are maintained by the Division-supervisors.

3.2 PERSONNEL QUALIFICATIONS

Personnel qualification requirements are determined by the Department of Civil Service and are outlined in the job specification for that job. The Job Information Packets outline career ladders specifying educational requirements and experience required for entry-level and advanced positions within a series of related jobs (e.g., Environmental Specialists). The Human Resources Section evaluates individual employee education and experience and notifies the division when the employee meets the qualifying requirements to advance to the next level in the career ladder. LDEQ personnel procedures are located in LDEQ's Policy and Procedures Manual.

3.3 EMPLOYEE TRAINING NEEDS

Training needs are determined annually on an individual basis by supervisors in consultation with employees. Training determinations are based on statutory requirements, management directives, SOPs, quality assurance project plans, and annual employee performance evaluations.

Training needs can be documented annually in the Performance Planning and Reviews (PPRs). Performance plans may address remedial training needed to correct deficiencies in performance, educational preparation, or professional experience and to address prerequisites for advancement and new or unique job requirements. Training topics may include technical, quality assurance,

operational, non-technical, and managerial topics. Additional training needs may be specified in quality assurance project plans.

3.4 TRAINING PROGRAMS

Training programs are designed by the Human Resources staff with input from the Quality Assurance Manager and the Quality Assurance Team, based on formal assessments of agency, office, division, program, and job requirements. Qualified instructors are identified on a course-by-course basis through resumes, interviews, proposals, and demonstrated competence. Written evaluations are used by the Human Resources staff to assess course content and instructor effectiveness.

Employees and supervisors determine whether training programs and courses offered outside of the LDEQ by educational institutions, professional associations, and other providers are available and useful. These programs and courses may include such activities as instructional courses, seminars, professional meetings, and workshops.

3.5 TRAINING RECORDS

The Human Resources staff maintains employee-training records for all training coordinated through the LDEQ Safety and Training Unit. Supervisors have the responsibility of maintaining employee training records and at least annually assess the training needs of their employees.

3.6 QUALITY ASSURANCE TRAINING

Quality assurance staff shall fulfill the educational, work experience, and training required for their positions and complete the training courses listed below:

1. Orientation to Quality Assurance Management
2. Data Quality Objectives Workshop
3. QMP/QAPP Seminar
4. Management Systems Review Workshop

The QAM and QAOs shall complete courses 1 – 4. The QACs, assessment team leaders and project managers shall complete courses 1 – 3. The supervisors shall complete course 1, at the minimum. The QAM may recommend exceptions to these requirements upon presentation of objective evidence of similar and equivalent training or experience in the quality assurance field.

The Region 6 QA Team will provide assistance to the QAM and QAT in the preparation, review, evaluation, and initial presentation of QA training courses. The QA manager and QA officers have been trained to conduct QA courses for LDEQ QA staff. The quality assurance manager shall be the point of contact for the agency in QA training matters and will communicate QA training assistance needs to EPA Region 6 QA staff.

4.0 PROCUREMENT OF GOODS AND SERVICES

The procurement of goods and services will be controlled and documented to assure conformance with specified requirements, i.e., that contracted and subcontracted activities produce results of acceptable quality. Requirements and specifications will be included or referenced in procurement documents. The acceptability of purchased items and services will be verified and documented.

4.1 AUTHORITY AND PROCEDURES

Statutory requirements concerning procurement are contained in the following:

- Louisiana Revised Statutes Titles 39, 38, and 43
- Purchasing Rules and Regulations and the LA Procurement Code
- Louisiana Revised Statutes Title 39:1481-1526 and Chapter 34 Part V: Procurement of Professional, Personal, Consulting and Social Services (Division of Administration Rules and Regulations)

Procurement procedures are documented in section 2003-88 of the DEQ Policy & Procedures Manual attached as Appendix F. These documents describe assignments of authority and procedures for planning and approving procurements, determining specifications and requirements to be included in procurement documents, selecting vendors, awarding procurements, and accepting purchased goods and services.

4.2 PROCUREMENT DOCUMENTS

All procurements are defined in writing in one or more procurement documents. These documents include purchase orders, internal requisitions, invitations for bid, requests for proposals, procurement contracts, contract request forms, non-competitive selection forms, contract certification forms, contract justification forms, and scope of services. These documents specify tasks and products, goals & objectives, technical requirements, quality requirements, administrative requirements, deliverables, methods used to measure and determine contract performance, a monitoring plan and other requirements. All procurements are approved prior to issuance. Approval requirements vary depending on the nature and cost of the goods or services being procured (See DEQ PPM). As a matter of policy, maximum competition among potential bidders and contractors is encouraged.

4.3 TECHNICAL REQUIREMENTS

Technical requirements are determined by program managers, or their designees, and are provided in procurement documents. Purchases of information technology products and services are also reviewed and approved by the Information Services Division Administrator.

4.4 QUALITY ASSURANCE REQUIREMENTS

Quality assurance requirements are determined by program managers, or designees, with assistance of Purchasing and/or Contracts staff, and documented in procurement documents. These documents include or reference appropriate design bases, certifications, and other requirements necessary to assure adequate quality, and, to the extent necessary, require suppliers and subcontractors to have quality assurance programs consistent with the DEQ program. Any certifications and or license required by statute, state law, or DEQ regulations will be a requirement set forth in the bid or negotiation process, i.e. Request For Proposals (RFP), Invitation to Bid (ITB), Solicitations. Evidence of such requirements must be provided prior to award. In competitive bid documents (RFP, ITB, Solicitations) requirements for sub-contractors (certifications, licenses, accreditations, etc.) will be identified and verification of such made prior to award. For non-competitive negotiations, it shall be the responsibility of the negotiating unit within DEQ to determine and verify the requirements for sub-contractors prior to issuance of the contract. In any event, state and federal laws, statutes and regulations with stated requirements for sub-contractors will be adhered to. An example of this would be the laboratory accreditation program, which requires that all state, local, federal and commercial laboratories, including sub-contractor laboratories; submitting data to LDEQ must be certified in accordance with LAC 33:1. Chapters 45 - 57.

Procurement documents may include pre- and post- award source inspections, supplier audits, readiness reviews, evaluations of objective evidence of quality furnished by the supplier, acceptance testing, and other requirements determined to be appropriate.

Professional, Personal, Consulting, and Social Services contracts: The monitoring plan in the contract ensures that the services and deliverables of the contract are fulfilled and that acceptable levels of service are provided. It is the project manager's responsibility to monitor the contractor's performance to assure compliance with the technical requirements of the contract.

4.5 CHANGES TO PROCUREMENT DOCUMENTS

Changes to procurement documents generally receive the same reviews and approvals as original procurement documents. Changes may be authorized only through written amendment or change order. Also, approval requirements for changes are determined on the basis of allowable cost changes within the realm of state statutes.

4.6 SOLICITATION RESPONSES AND SUPPLIER SELECTIONS

Responses to solicitations are reviewed by Procurement personnel and personnel from the requesting unit who have technical expertise. Review is to ensure that the product being bid meets required specifications.

For Personal, Professional, Consulting, and Social Services contracts, a selection committee reviews responses to solicitations. The selection committee is composed of LDEQ technical personnel from the office/division from which the solicitation is requested. The selection committee will evaluate and rank all proposals according to the criteria listed in the solicitation. At a minimum, criteria will include technical approach, cost, relevant experience of the firm, and qualifications of key personnel assigned to the project.

4.7 ACCEPTANCE OF GOODS AND SERVICES

Goods are received by receiving personnel in accordance with written DEQ procedures and in line with acceptable receiving practices as defined by state law.

Goods are inspected upon receipt for noticeable damages/defects and are evaluated against criteria contained in purchasing documents. Items not meeting written criteria or which show a noticeable defect are rejected for delivery and vendor/supplier immediately contacted. End users determine whether acceptance criteria have been met and whether goods or services are adequate or appropriate for use.

Goods and services, which contain latent defects, are also not accepted for use.

Corrective actions are initiated in accordance with state statutes, contract provisions and DEQ procurement procedures. Corrective actions may range from replacement of defective deliverables to re-award of purchases.

For Personal, Professional, Consulting, and Social Service contracts progress reports are submitted to the project manager with invoices for payment. Progress reports provide the project manager with information on the status of work performed showing that work is on schedule or that progress is being made. Invoices are reviewed and approved by the project manager and submitted to

Fiscal Services for payment. Services or deliverables that do not meet contract requirements are not accepted. Corrective actions may range from requiring resubmission of a deliverable to termination of the contract.

5.0 DOCUMENTS AND RECORDS

For the purpose of these requirements, a document is any volume that contains information that describes, defines, specifies, reports, certifies, requires, or provides data or results pertaining to environmental programs. All records and documents are considered public record and as such shall be available to the public during working hours. Documents that specify requirements and instructions affecting the quality of environmental programs shall be adequate for the intended purpose and shall be controlled. Quality assurance records will be produced, controlled, and maintained so as to reflect the achievement of the required quality for completed work and to fulfill statutory, regulatory, and contractual requirements. Records are kept a minimum of three years; typically documents are maintained for much longer. All records/ documents including permits, notification forms, enforcement documents, analytical data, etc. are maintained in centralized files.

5.1 QUALITY ASSURANCE DOCUMENTS

Documents that specify quality-related requirements and instructions include:

- LDEQ QMP,
- QAPPs,
- sampling and analysis plans,
- SOPs, and
- program guidance documents.

The QMP and QAPPs are prepared, reviewed, approved, distributed, maintained, and revised according to procedures described in appendices D and E, respectively. Sampling and analysis plans are prepared, reviewed, and approved according to the same procedures as QAPPs.

Currently, SOPs are proposed, reviewed, and approved by staff and managers of relevant areas of the agency (e.g., water quality sampling procedures). SOPs are reviewed annually and revised as needed. New SOPs and revisions to existing SOPs are uniquely identified. Each new SOP (and revision of an existing SOP) is approved, prior to issuance, by the QA coordinator and/or the project manager with concurrence from the Office QA officer. SOPs will refer to the Guidance for the Preparation of Standard Operating Procedures (SOPs) for Quality-Related Documents, (EPA QA/G-6).

The quality assurance manager and the QAT shall coordinate development of agency-wide quality assurance procedures. At a minimum, the quality assurance manager and the QAT will develop and maintain procedures for review, approval, distribution, revision and control of quality assurance documents such as the QMP, QAPPs and SOPs.

5.2 QUALITY ASSURANCE RECORDS

Quality assurance records are items that furnish objective evidence of the quality of items or activities that have been verified and authenticated as technically complete and correct.

Quality assurance records may include photographs, drawings, forms, reports, and electronically recorded data.

Assignments of authority and procedures concerning the identification, verification, authentication, handling, retention, and disposition of (documents and) records needed to safeguard the legal and financial rights of the State of Louisiana and any person directly affected by activities of the LDEQ are contained in Title 44 of the Louisiana Statutes. Records produced by LDEQ and maintained as official records of the State of Louisiana are documented in the agency Records Retention Schedule.

6.0 COMPUTER HARDWARE AND SOFTWARE

The acquisition and installation of computer hardware and software will be controlled to insure conformance with standards and compatibility with existing and planned network, hardware, and software. The Office of Management and Finance (OMF) sets standards, and the Information Services Division approves acquisitions and performs installations. The Office of the Governor's Procurement Support Team, as authorized by RS 39:196-200, must approve all requisitions of \$50,000 or greater for computer hardware and all requisitions of \$100,000 or greater for computer software.

6.1 HARDWARE

Servers and Network components are purchased, installed, and maintained by the Technical Support Section of the Information Services Division. This equipment is routinely upgraded as cost efficient alternatives become available to meet the existing and projected infrastructure needs of the agency. Uninterrupted power supplies (UPS) are utilized on all servers, network hubs, routers, and switches. Annual maintenance contracts with manufacturer approved service centers are utilized where appropriate.

Client workstations are installed and maintained by the Technical Support Section. The Office of Management and Finance establishes minimum configurations for CPU, memory, and disk storage. All client workstations are routinely upgraded or replaced to conform to this standard.

High speed networked printers are made available to every workgroup, with limited use of desktop printers for special circumstances such as confidentiality.

6.2 SOFTWARE

Standards are set by OMF for system software and tools on client workstations. The Undersecretary, on an individual basis, approves exceptions to these standards. The Technical Support Section installs and maintains all client workstation software.

The Application Development Section of the Information Services Division, with consultant assistance, has developed an Integrated Data Management System (IDMS) which is the repository for all ambient and site related environmental data. Existing stand-alone systems have been replaced by the IDMS. Cleanup and reconciliation of the migrated data is in progress. All future application development will be tightly integrated and conform to the standards set by this system.

6.3 GIS

The GIS Section of the Technical Services Division has developed quality standards for positional data. All positional data, whether obtained from external sources or agency personnel using global positioning systems, is accompanied by codes giving the method by which it was gathered and from which its accuracy may be inferred. It is the responsibility of the program organizations to insure that the data meets the standard.

6.4 DATA AND INFORMATION

The responsibility for data quality lies with the program organization, regardless of whether the information is produced from or collected by computers. During software development, the requirements for data quality are captured by the requirements-gathering process like any other requirements, and the inspection and testing procedures insure that the software delivered meets those requirements.

LDEQ backs up all data on tape following a regular protocol:

Weekly

Backup

Monday - Thursday

Incremental backups daily

Friday

Full systems backup

Monday

All data tapes from the previous week are shipped to an offsite, environmentally controlled storage facility

All weekly data tapes are retained in storage for 6 weeks and then recycled. Monthly data tapes (backups at first of the month) are kept in storage for 2 years and then recycled. Two complete systems backups are made once at the first of the calendar year and again at the first of the fiscal year (July 1). These two full backups are kept in storage in perpetuity.

7.0 PLANNING

Environmental programs shall be planned in accordance with state and federal laws and rules, agency policies and procedures, and contractual requirements.

7.1 REQUIREMENTS

Organizational and programmatic requirements concerning environmental programs are defined in statutes enacted by the Louisiana Legislature and United States Congress, strategic plans developed by LDEQ, rules promulgated by LDEQ and federal agencies, and requirements documents adopted by LDEQ and federal agencies. These documents determine goals, establish stakeholder and customer relationships, and define needs and expectations for environmental programs implemented by LDEQ.

7.2 SPECIFICATIONS

Environmental programs and projects are planned through the development of organizational business plans and budgets, Performance Partnership Agreements, grant work plans, QAPPs (and sampling and analysis plans), DQOs, assessment plans, and contracts executed by LDEQ and external organizations. These documents translate requirements and expectations into measurable specifications, commitments, and performance criteria.

7.3 COST AND SCHEDULE CONSTRAINTS

Cost and schedule constraints are taken into consideration during the development of the LDEQ strategic plan, the annual budget request to the Louisiana Legislature, and negotiations for federal assistance agreements. Funds for environmental programs are appropriated on an annual basis by the Louisiana Legislature and allocated annually by LDEQ management during preparation of the agency's operating budget.

7.4 PROJECT PLANNING

Projects involving the generation, acquisition, and use of environmental data are planned through the development of QAPPs. Generic QAPPs for programs may be developed. Generic QAPPs will be developed for programs routinely implementing the same types of projects (i.e. watershed intensive dissolved oxygen surveys, RCRA activities, etc.). If generic QAPPs are developed for a program area, project or site-specific details will be planned through development of sampling and analysis plans.

QAPPs are developed by project managers, quality assurance staff, technical staff, management, and contractors (project team) and represent the product of DEQ's systematic planning process outlined in EPA's *Requirements for Quality Assurance Project Plans for Environmental Data Operations, EPA QA/R-5*. Environmental data project planning meetings and efforts are coordinated by project managers and QA staff. The goal of such planning efforts is to utilize the *EPA QA/R-5* in a step-by-step fashion to produce a QAPP documenting the project's management, data generation and acquisition activities, assessment and oversight requirements, and data validation and usability aspects. Additional guidance may be obtained from *EPA Guidance for Quality Assurance Project Plans, EPA QA/G-5*.

Each QAPP element (e.g. QAPP A4) listed in *EPA QA/R-5* will be addressed. If the element does not apply to the project, a statement describing that situation will be included in the QAPP. The following steps outline the process that project teams will use to plan projects and develop QAPPs:

1. Define the organization and responsibilities of all parties involved (QAPP A1, A3, and A4)
 - Identify members of the project team
 - Identify primary decision maker
 - Identify approving authorities
 - Identify other project participants and responsibilities
 - Identify who will receive QAPP
2. Describe project (QAPP A5)
 - Provide history and background, including available data that may be used to support project
 - Identify principle data user(s)
 - Develop statement of problem to be solved, decision to be made or outcome to be achieved
 - Identify any resulting actions that are to result from the project (may be formed as decision statements)
3. Summarize schedule of tasks and products (QAPP A6)
 - List measurements expected to address project's problem statement, decision or outcome
 - Provide or reference applicable technical criteria or standards
 - Describe any special personnel or equipment that indicate project's complexity
 - Describe briefly the timing of any assessments and roles of parties involved
 - Indicate the most important documents and records (details of the documents and records are covered in A9)

4. Define quality objectives (QAPP A7)
 - Clarify intended use of the data
 - Define type of data needed to meet the intended use, for example, range, median, or mean
 - Identify conditions under which data should be collected (spatial and temporal)
 - Define any applicable performance criteria applicable to the data. Performance criteria may include, but are not limited to, decision (sampling) errors, measurement errors, equipment and/or method specifications and sensitivities, etc.
 - Define any applicable decision statements (e.g. if ... then ... statements)
5. Identify any special training and certification requirements for project participants (QAPP A8)
6. Describe in detail required project documentation and records and disposition of the information (QAPP A9)
7. Describe sampling process design (QAPP B1)
 - Type of design (simple random, authoritative, stratified)
 - Define types and numbers of samples required
 - Identify sampling locations and frequencies
 - Outline sample matrices
 - Outline anticipated schedules (specific to sampling, not for the overall project as done in A6)
 - Identify critical and non-critical measurements
 - Rationale for the design
8. Describe sampling methods (QAPP B2)
9. Describe requirements for sample handling and custody (QAPP B3)
10. Describe analytical methods (QAPP B4)
11. Identify or reference quality control (QC) activities and criteria for each sampling, analysis or measurement process (QAPP B5)
12. Describe how instruments and equipment will be inspected, tested and maintained (QAPP B6)
13. Identify instruments and equipment requiring calibration and outline frequencies (QAPP B7)
14. Describe how and by whom supplies and consumables will be inspected and accepted for use (QAPP B8)
15. Identify any types of data required for completion of the project not directly obtained by project monitoring activities (i.e. literature data, historical data) (QAPP B9)
16. Describe data management, from generation of the data to it's final use (QAPP B10)
17. Describe in detail project assessments and response actions (QAPP C1)
 - Assessment frequency and type
 - Minimum assessment requirement for environmental data operations are

outlined in section 9 of the QMP

- Describe how response actions are to be addressed and by whom
18. Identify type and frequency of reports to management outlining project status (QAPP C2)
 19. State criteria used to review and validate (accept, reject or qualify) data in an objective and consistent manner (distinguish between verification and validation). (QAPP D1)
 20. Describe the processes or methods used to verify and validate data (distinguish between verification and validation). (QAPP D2).
 21. Describe how project results will be reconciled with project objectives (QAPP D3)
 22. Finalize QAPP by completing table of contents (QAPP A2)
 23. Route QAPP to management and QA program (if appropriate) for review and approval
 24. Route DEQ-approved QAPP to EPA project and grant officers for review and approval

8.0 IMPLEMENTATION OF WORK PROCESSES

Environmental programs shall be performed so as to ensure that customer needs and requirements are met and products and results are produced in a timely manner. Environmental programs conducted by or on behalf of the LDEQ shall be implemented in accordance with approved plans. Exceptions, deviations, and changes to these documents shall be approved and documented prior to implementation.

8.1 QUALITY SYSTEM IMPLEMENTATION

The LDEQ ensures environmental work is performed according to plan through the following:

- implementation of a formal quality assurance program;
- program and project planning;
- staff development and training; and
- ongoing oversight of performance.

The quality system implemented by LDEQ is described in sections 1 and 2 and elsewhere in this QMP. Program and project planning inputs, processes, and results are described in sections 5 (quality assurance documents) and 7 (customer requirements, specifications, cost and schedule constraints, and project planning) of the QMP. Staff development and training activities are described in section 3 of the QMP. Assessment and response (oversight) programs implemented by LDEQ are described in sections 9 and 10 of the QMP.

8.2 IMPLEMENTATION SCHEDULE

The QMP and QAPPs are revised annually, or more frequently to document significant changes, as stated in Appendix D and E. QAPPs are prepared and approved according to the timetables set forth in the specific grant work plans. The quality assurance manager shall monitor the status of the QMP and QAPPs and shall report to the Secretary or his designee within 30 calendar days the status of QMP revisions and any environmental data operations that do not have approved QAPPs.

9.0 ASSESSMENT AND RESPONSE

An assessment and response procedure designed to measure the effectiveness of the agency quality system will be developed and implemented by the QA Manager and the QA Team. Assessment results will be reported to appropriate management, supervisory, and other personnel for review and action as necessary. Follow-up actions will be taken where appropriate.

Environmental work activities are reported to division, office, and executive management on a quarterly basis. The results of these work activities are measured by LDEQ and external organizations against specifications contained in approved plans on an annual basis, at a minimum.

9.1 TYPES OF ASSESSMENTS

The LDEQ will utilize one or more of the following types of assessments:

- management systems reviews
- technical system audits
- data quality assessments
- performance evaluations
- performance audits
- readiness reviews

A management system review will be conducted in each office on a rotational basis so that each office undergoes a review once every 5 years. A technical systems audit will be conducted on each division within an office and each regional office at least annually. Data quality assessment is an ongoing process where data is assessed as it is collected. Performance evaluations of employees occur annually and are conducted by supervisors. A performance audit is conducted on ambient monitoring and sampling equipment to ensure that a percentage of all samplers are audited each quarter based on statutory requirements. A readiness review is an ongoing process conducted by a supervisor or project leader prior to an inspection or sampling event to ensure that all documents, check lists, equipment and supplies are appropriate for the activity to be performed.

9.2 ASSESSMENT PLANNING

Assessment plans and schedules shall take into account such factors as public health and safety, budgets, results of prior assessments, grant/program coverage and continuity, complexity of work activities, management criteria, and existing commitments (e.g., QAPPs). Scheduled assessments will be supplemented by

unscheduled or unannounced assessments requested by supervisors or determined by QACs and QAOs to be appropriate.

The QAO in each office shall prepare written assessment plans for their programs by December 31st of each year. QAOs will meet with supervisors and QACs in developing these plans.

Annual assessment plans will list the programmatic and project-related assessments planned, as well as the scope and anticipated date (month or quarter) of each assessment. Quality assurance officers will revise annual assessment plans as necessary to reflect changes in work activities or other factors. Annual assessment plans and revisions to annual assessment plans shall be approved by the Assistant Secretary and QA Manager prior to implementation and distributed to the quality assurance coordinators and supervisors.

9.3 QUALIFICATION OF ENVIRONMENTAL DATA

QAPPs prepared by the LDEQ will identify the quality of data needed to adequately describe each project. This data may be used to support a planning or enforcement action and should be sufficient to handle that support. Although present conditions are of paramount importance, planning for data collection will consider the potential for environmental change with respect to time.

Data obtained from sources that did not use, or fully comply with, a QAPP or equivalent planning document for data collection must also be qualified (i.e., validated for use). Data and data validation procedures will be documented in the appropriate QAPP. The procedures will document the decision process and factors used in arriving at the choice of the particular qualification method. This process will include the correct application of statistical methods during the assessment process. The decision to qualify the data for their intended use will be based on reconciliation with the performance measures for the project defined by the data quality requirements. Any limitations on data use will be identified quantitatively to the extent practicable and fully documented.

Environmental data that may be generated outside of a quality assurance program or an approved QAPP and used in an environmental program will be qualified according to its intended use. The data and the methods used to qualify such data will be identified in the appropriate QAPP.

9.4 ASSESSMENT STATUS REPORT

Quality assurance officers shall provide a summary report of quality-related assessments and assessment results to the quality assurance manager annually. The report will include assessments and corrective actions implemented by the offices and other information required by the QAM for the agency annual QA report to executive staff and EPA.

The quality assurance manager shall issue a summary report of quality-related assessments and assessment results affecting the agency quality system annually to the Secretary, the Assistant Secretaries, and other parties the Secretary deems appropriate. A copy shall also be forwarded to the EPA Region 6 QA Manager. The summary report will include information provided by the QAOs from the respective offices related to:

- the assessments conducted and status of corrective actions;
- significant quality assurance issues or concerns to be addressed;
- status of QA staff training;
- status of QA training for supervisors and other LDEQ staff;
- status of QAPPs and related SOPs;
- assessment plans and schedules for the coming year;
- current list of program or project QA staff.

9.5 ASSESSMENTS

Assessments will be led by an assessment team leader and conducted by teams consisting of one or more individuals, trained in accordance with 3.6.

Selection and composition of assessment teams shall be appropriate for the scope and objective(s) of the assessment. The role of each team member shall be specified, and each team member shall be qualified to perform his or her role.

The scope, objectives, and results of assessments shall be documented. Responses to assessments shall be documented, proposed corrective actions shall be evaluated, and the effective implementation of corrective actions shall be verified.

Unless other arrangements have been made, an assessment team leader shall forward a written assessment report to the supervisors and the appropriate quality assurance officer within 30 calendar days of completing the on-site phase of an assessment. If an assessment report contains adverse findings, supervisors of the affected projects shall forward written responses to the assessment team leader within 30 calendar days of receiving the assessment report.

9.6 AUTHORITY AND ACCESS

Assessment teams shall have access to all work areas, documents, records, personnel, and supervisors that, in the judgment of the team leader, are reasonably necessary to:

- conduct an assessment;
- identify noteworthy practices and quality problems;
- propose solutions to quality problems; and
- verify the timely implementation and effectiveness of systems, activities, items, and corrective actions.

9.7 SUSPENSION OF ASSESSMENTS

An assessment may be suspended if, in the judgment of the assessment team leader, the objectives of an assessment cannot be achieved or a continuation of an assessment could jeopardize the health or safety of any member of the assessment team. The assessment team leader shall notify the supervisors and quality assurance officer as soon as practicable after suspending an assessment and shall describe the reasons for the suspension.

9.8 EPA ASSESSMENTS

EPA-sponsored programs are subject to review at any time. Formal assessment of performance under EPA assistance agreements occurs as part of a comprehensive review and evaluation of LDEQ programs.

10.0 QUALITY IMPROVEMENT

LDEQ will strive to maintain and continually improve quality systems established by the Offices for their environmental programs.

Agency functions described in the preceding sections detail how LDEQ will plan, implement, monitor and assess the environmental program quality systems within each office. Personnel working within the program areas will be trained to identify, plan, implement, and evaluate quality improvement activities for the projects for which they are responsible.

10.1 PROCESS TO IDENTIFY, PLAN, IMPLEMENT AND EVALUATE EFFECTIVENESS OF QUALITY IMPROVEMENT ACTIVITIES

The quality assurance manager will have the responsibility for ensuring that the agency QA program is timely and relevant. The QAM will ensure that quality improvement activities are incorporated into each Office QMP and their respective QAPPs and SOPs. The QA officers for each Office, supervisors and QA coordinators within each program will be responsible for their respective quality improvement activities.

Each Office QMP and QAPPs will include procedures to ensure that early and effective corrective action will be taken when data quality falls below established limits. Each plan will describe the mechanism(s) to be used when corrective actions are taken to produce the desired results, and what steps will be taken should corrective action not take place, or not be effective. Each plan will also include provisions to keep the appropriate supervisor and QA coordinator informed of the performance of the data collection systems.

10.2 CORRECTIVE ACTION PROCEDURES

LDEQ has implemented the following corrective action procedures to be utilized by each Office to ensure consistency in addressing quality system deficiencies.

Corrective action will be minimized through the development and implementation of routine internal program controls prior to an adverse program impact. Routine program controls will include the following:

- Each measurement system will have predetermined limits to identify when corrective action is required, before the data becomes unacceptable.
- A procedure will be established for each measurement system to identify the corrective action that will be taken when the control limits are exceeded.
- For each measurement system, the level within the organization responsible

- for taking corrective action will be identified, and also the level within the organization responsible for approving corrective action will be identified.
- The QA Officer will be notified of corrective actions that result in a change in procedures or a loss of data resulting from a corrective action.

The following activities could initiate corrective actions:

- Data quality audits
- Failure to adhere to the approved QMP, QAPP or SOP
- Technical system audits
- Performance audits

The QA Officer in each Office will ensure the implementation of corrective action plans and will advise the appropriate supervisor if these plans are not implemented in a timely manner. In the case of significant conditions, the QA Officer will also advise the Assistant Secretary, the appropriate Administrator and the Quality Assurance Manager if corrective action plans are not completed in a timely manner. The QA Officer will notify the supervisor, and in the case of significant conditions, will also notify the Assistant Secretary, the appropriate Administrator and the Quality Assurance Manager when corrective action plans are completed.

Semi-annually the QA Officer for each Office will assemble an assessment team to review quality-related deficiencies, non-conformances, and programmatic improvements and advise the affected supervisor, the appropriate Administrator and/or Assistant Secretary and the Quality Assurance Manager of any significant quality assurance trends.

Semi-annually the QA Manager will review quality-related deficiencies, non-conformances, and programmatic improvements and advise the Secretary of any significant trends affecting the agency quality assurance program. The Quality Assurance Manager will also provide to the Secretary and the EPA Region 6 Quality Assurance Officer an annual report describing the status of the quality assurance program.

The Secretary and the executive staff are authorized to stop work as necessary to safeguard programmatic objectives, worker safety, public health, and environmental protection.

10.3 OUTREACH AND ASSISTANCE

The quality assurance manager will maintain a close liaison with the quality assurance staff in each Office and will meet at least annually with EPA and the respective LDEQ Offices concerning quality assurance matters.

The QAM is developing an intranet website that provides Departmental wide access to the QMP and all SOPs, QAPPs, sampling plans and other QA/QC related documents.

Appendix A

Environmental Programs Governed by QMP

APPENDIX A. LDEQ QMP 2000 ENVIRONMENTAL PROGRAMS COVERED BY THE QMP

The LDEQ has implemented a formal quality assurance program for environmental data operations related to the multiple federally funded programs. Descriptions of the various programs follow and Appendix G lists the projects and associated QAPPs that have been implemented under the various programs.

Clean Air Act (CAA)

Major air quality activities covered under the agency quality assurance program fall under two main sections, 103(b) and 105.

Section 103(b):

- Particulate Matter 2.5 (PM_{2.5}) Ambient Air Monitoring Network activities support the statewide monitoring of particulate matter less than 2.5 microns.

Section 105:

- AFS Compliance Reporting program involves the automated reporting to EPA of compliance data for regulated point sources. (Note: The emissions data component of AFS is no longer in operation. The EPA emissions data storage function is now served by the National Emissions Trends Database (NET). LDEQ staff are evaluating the new NET reporting format and resource requirements to convert from the agency's database format to NET.)
- Ambient Air Monitoring Network Program covers the monitoring of criteria pollutants (particulate matter, sulfur dioxide, carbon monoxide, nitrogen dioxide, ozone, and lead) and other information to gather data to demonstrate compliance with National Ambient Air Quality Standards (NAAQS). The CAA and its amendments provide the framework for all pertinent organizations to protect air quality. The framework provides for the monitoring of these criteria pollutants by State and local organizations through the Air Quality Monitoring Program and different networks of stations, outlined below:
- The State and Local Air Monitoring Stations (SLAMS) consist of a network monitoring stations whose size and distribution is largely determined by the needs of state and local air pollution control agencies to meet their respective State Implementation Plan (SIP) requirements.
- The National Air Monitoring Stations (NAMS) are a subset of the SLAMS network with emphasis being given to urban and multi-source areas. In effect, they are key sites under SLAMS, with emphasis on areas of maximum concentrations and high population density.
- Special Purpose Monitoring Stations (SPMS) provide for special studies needed by the state and local agencies to support their State Implementation Plans (SIPs) and other air program activities. The SPMS are not permanently established and, thus,

can be adjusted easily to accommodate changing needs and priorities. The SPMS are used to supplement the fixed monitoring network as circumstances require and resources permit. If the data from SPMS are used for SIP purposes, they must meet all QA and methodology requirements for SLAMS monitoring.

- The Photochemical Assessment Monitoring Stations (PAMS) network is required to measure ozone precursors in each ozone non-attainment area that is designated serious, severe, or extreme. The required networks will have from two to five sites, depending on the population of the area.
- Asbestos Demolition and Renovation program
Louisiana regulates asbestos, specifically that portion related to the National Emissions Standards for Hazardous Air Pollutants (NESHAP), Section 112 of the Clean Air Act, to reduce ambient exposures and the accompanying health risk. A QAPP is prepared to satisfy the requirements of the 105 grant asbestos NESHAP compliance work that requires the State to demonstrate that a quality system is in place related to asbestos demolition and renovation compliance activities.

Clean Water Act (CWA)

Section 104(b)(3): These grants are frequently made available to state water pollution control agencies to conduct and promote research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent prevention, reduction, and elimination of pollution. Projects and programs supported by 104(b)(3) funding support the development of strategies to improve water quality and oversight of implementing the strategies.

Projects and studies implemented by DEQ utilizing these grants and covered under the QMP include:

- ecological, biological and water quality monitoring;
- toxicological assessments;
- fish tissue analyses;
- geographic determinations of pollution; and
- total maximum daily load (TMDL) research.

Section 106: These grants are made to state water pollution control agencies to support establishment and operation of devices, methods, systems, and procedures necessary to monitor, and to compile and analyze data on, the quality of navigable waters, and when practicable, ground waters. Information may be used to characterize existing conditions, evaluate spatial and temporal trends, determine water quality standards compliance, identify emerging problems, and evaluate the effectiveness of water quality control programs.

Surface water programs at DEQ supported by this grant and covered by the QMP include:

ambient surface water monitoring (which includes routine sampling at network sites, intensive surveys for special projects including TMDL development, and other special studies); data management; and providing education and technical assistance to the community. Ground water programs at DEQ supported by this grant and covered by the QMP include baseline monitoring of state's aquifer systems for ambient water quality and making this information available to the public.

Section 319(h): These grants are designed for states to implement preventive measures and watershed restoration action strategies relating to nonpoint sources of pollution including runoff and leachate from agricultural, forested and urbanized lands. The nonpoint source program is also active in the TMDL development process and provides oversight of grants for data collection and analysis, outreach activities, and development of watershed action plans. Any environmental data project implemented with 319 funds is considered covered by this QMP.

Section 320: In 1990, the US Environmental Protection Agency (EPA) and the State of Louisiana formed a partnership called the Barataria-Terrebonne National Estuary Program (BTNEP). BTNEP was established under the authority of Section 320 of the Clean Water Act. It is administered and funded by the EPA and the State of Louisiana. The BTNEP was established to protect the Barataria-Terrebonne estuary from future degradation and to undertake programs that check human-induced or natural damage that has already occurred to habitats throughout the estuary. LDEQ's BTNEP provides oversight of grants for data collection and analysis and outreach activities.

Section 604(b): Under the State Water Pollution Control Revolving Funds title of the Clean Water Act, Section 604(b) outlines the use of funds by states for to carry out planning efforts under sections 205(j) and 303(e) of the Act. These funds are typically used for technical support, training and other water quality management planning activities for the TMDL and water permits programs.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
– Superfund Amendments Reauthorization Act (SARA)

Superfund: The Superfund program is responsible for ensuring remediation of sites posing an unacceptable risk to public health and safety or the environment. For sites named by EPA to the National Priorities List, LDEQ either assists EPA or takes the lead in project management of remedial investigations, feasibility studies, remedial design, remedial action, and operations and maintenance phases of overall remediation. For other sites, LDEQ identifies potentially responsible parties and monitor cleanup activities; if responsible parties cannot be identified, staff oversee and direct cleanup activities.

Resource Conservation and Recovery Act (RCRA)

- **Solid Waste Disposal Act (SWDA)**
- **Hazardous and Solid Waste Amendments (HSWA)**

Section 3011: This section of RCRA is the state funding programs covering:

- the promotion of activities that reduce or eliminate industrial, hazardous, or radioactive waste generation;
- ensuring that remaining waste is properly identified, managed and safely disposed;
- expediting the closure and cleanup of contaminated sites;
- collecting and reporting data on hazardous waste generation, receipt, treatment, storage and disposal;
- reviewing permit applications and writing permits;
- conducting hazardous waste determinations; and
- conducting compliance monitoring and enforcement activities.

Section 9003 (Subtitle I - Solid Waste Disposal): Leaking underground storage tank program --This program directs or conducts oversight for the investigation and remediation of sites where releases of petroleum products from underground storage tanks have occurred. Activities include conducting site contamination assessments, remedial action feasibility studies, environmental and human health assessments; development of remedial action procedures; executing remedial actions; and documentation of effectiveness of remediation.

Sections 2007 and 9004 (Subtitle I – Solid Waste Disposal): Underground storage tanks (UST)

This program ensures that all underground storage tanks are in compliance as mandated by federal and state regulations and that underground storage tanks that are not active are properly closed. The primary objective of this project is to ensure that all active underground storage tanks in the State of Louisiana have been upgraded to meet EPA standards. To ensure that USTs are properly installed, LDEQ certifies all tank installers. Certification is determined by education/experience and testing requirements. Field staff inspects those UST facilities where upgrades have been completed in order to ensure that the USTs have been upgraded properly. A second objective is to ensure that inactive tanks are being closed according to EPA standards and do not pose a threat to human health and the safety of the environment.

Toxic Substances Control Act (TSCA)

Section 402: The TSCA Lead Program Development grant requires the State to demonstrate that a quality system is in place related to lead based paint activities. A QAPP has been developed and implemented to satisfy these requirements. The LBP program includes recognizing training providers, accreditation of individuals who perform lead based paint activities associated with target housing and child occupied facilities,

tracking and inspecting lead abatement notifications, complaint investigations and public outreach

Section 404: The State implements a program, that protects its citizens from asbestos hazards, that is funded by the USEPA under a TSCA Cooperative Agreement with the Office of Compliance Monitoring (OCM). The Department conducts management plan inspections in schools and state buildings to reduce exposure to asbestos hazards through compliance monitoring. Inspectors evaluate the compliance status of facilities using standard inspections and reports. Enforcement action is taken as warranted and tracked.

Appendix B

Office Responsibilities and Quality Assurance Staff Organizational Charts

APPENDIX B

AGENCY AND OFFICE MISSIONS

LDEQ MISSION

The mission of the Louisiana Department of Environmental Quality (LDEQ) is to provide service to the people of Louisiana through comprehensive environmental protection in order to promote and protect health, safety and welfare while using sound policies regarding employment and economic development.

OFFICE MISSIONS

Office of the Secretary

The mission of the Office of the Secretary is to plan and direct day-to-day operations of the LDEQ, ensure accountability of program functions through internal auditing and management of the agency's quality assurance program, provide legal and technical advice to the Secretary, and provide accurate and timely information to the public, the legislature, state, local and federal agencies, and the regulated community.

The Office of the Secretary is comprised of five (5) sections:

- Internal Audit
- Legal Services and Investigation
- Technical Advisors
- Special Projects
- Public Information

Office of Management & Finance

1.0 OMF Mission

The mission of the Office of Management and Finance (OM&F) is to provide effective and efficient support and resources to all the Department of Environmental Quality (DEQ) Offices and external customers necessary to carry out the mission of the department. The specific role of OM&F is to provide Fiscal Services (Accounting, Budget, and Funds Management), Technical Services (Information Services and Laboratory Services), Human Resources (Safety and Training), and Administrative Services (Contracts & Grants, Procurement, Property Control, Central Supplies, Mail

Room, Telecommunications, Rentals and Leases, and Fleet Management) to the Department and its personnel.

1.1 Division Responsibilities

The four divisions of the OMF have specific responsibilities that serve the overall office mission stated earlier.

1.1.1 Administrative Services Division

The Administrative Services Division (ASD) ensures that the offices and division are provided with services in the following areas: procurement, contracts and grants, human resources, motor pool, fleet management, central supply, mail operations, property management and telecommunications.

1.1.2 Financial Services Division

The Financial Services is responsible for coordinating budget preparation, travel reimbursement, accounts payable, accounts receivable, payroll, invoicing, the Motor Fuel Trust Fund, and all financial matters for the department. The division works closely with all divisions and offices on budgeting, expenditures, and monitoring.

1.1.3 Information Services Division

The Information Services Division is responsible for providing the technical tools and expertise for data collection, information management and decision support to aid the department in fulfilling its mission.

The Division is composed of three sections – The Information Services Section which provides server, network, client, and application support. The Geographical Information Services Section which provides base maps and GIS support. The Document Imaging Section which provides record management support.

1.1.4 Laboratory Services Division

The Laboratory Services Division is responsible for providing timely and effective laboratory services to the department and laboratory accreditation services. The division works closely with all divisions and offices.

1.1.5 Human Resources Division

The Human Resources Division is responsible for processing of pay and classification issues and resolution of related-employee problems, orientation of new employees, interpretation of rules and procedures. The division works closely with all divisions and offices.

Office of Environmental Services

The Office of Environmental Services is divided into two divisions: Permits and Environmental Assistance. The Permits Division provides a clean, safe and healthy environment to the citizen's of Louisiana by issuing permits which limit discharges and emissions of pollutants into the environment and protects the health of its citizen's by the issuance of registrations, licenses, accreditations to individuals trained to use certain equipment and/or to conduct certain activities. The Environmental Assistance Division provides assistance to both business and private citizens, via outreach, complaint resolution, and enhanced community/industry relations. The OES shall strive to deliver to the individuals and entities they serve effective, efficient, and responsive customer service that is of the highest quality and consistent with the mission of the OES.

The goals of the Office are as follows:

- a. All permits, registrations, licenses, and accreditations shall be protective of human health and the environment.
- b. All permits, registrations, licenses, and accreditations shall be developed and issued using standard operating procedures in conformance with regulations and approved guidance documents.
- c. OES will strive to issue permits, registrations, licenses, and accreditations that are timely and free of legal, grammatical and technical deficiencies
- d. All applications for permits, registrations, licenses, and accreditations will be reviewed and processed in a fair, consistent manner.
- e. All permits, registrations, licenses, and accreditations documents will be available to the public for review.
- f. All outreach services, documents, activities and presentations shall be in conformance with regulatory programs, timely up-dated, and technically accurate.

Office of Environmental Compliance

The mission of the Office of Environmental Compliance is to protect and enhance the quality of air, water, and soil in Louisiana to promote the health, welfare and productive capacity of its citizens through effective and timely inspection and enforcement activities that ensure compliance with the Environmental Quality Act and state and federal regulations.

The office of Environmental Compliance is comprised of the following Divisions:

- Surveillance
- Enforcement

The Surveillance Division ensures that industries comply with the state and federal regulations and their permits, administers the regional surveillance activities, monitors ambient air and water quality and participates in interoffice projects in conjunction with the Office of Environmental Assessment and the Office of Environmental Services. The Surveillance Division consists of Regional Offices that are responsible for compliance inspections, response to environmental incidents and ambient sampling activities. Field activities are scheduled and carried out by staff in six regional offices, each responsible for the activities of a specific geographical region. Activities include industrial facility inspections, investigating complaints and spills, responding to environmental emergencies, operating sampling locations, and serving as liaisons with local industry, local government and the general public of each region.

The Enforcement Division is dedicated to protecting human health and the environment by taking swift action to enforce the state and federal regulations. The Division is committed to a fair and sensible approach to enforcement that is responsive to the needs of the citizens of Louisiana. The Enforcement Division is responsible for ensuring the compliance of the State's regulations by the issuance of compliance orders and penalty notices to violators. The Division works closely with the Surveillance Division and the Permits Division of the Office of Environmental Services.

Office of Environmental Assessment

The mission of the environmental assessment program is to maintain and enhance the environment of the state in order to promote the health, safety and welfare of the people of Louisiana. This program provides for an efficient means to develop and implement environmental regulations, construct strategic plans, inventory and monitor emissions, report on the performance of the environment, provide technical expertise, and implement a unified approach to remediation of contamination in the environment. This program pursues a unified approach to remediation; simplifies and clarifies the scope of the process; reduces review time and labor; increases responsiveness to the public and regulated community, and increases accountability.

The Office of Environmental Assessment is comprised of the following divisions:

- Environmental Planning
- Environmental Evaluation

- Environmental Technology
- Remediation Services

Functions carried out by these divisions include: regulation development; strategic planning; non-point source pollution reduction; total maximum daily load (TMDL) program implementation; state implementation plans (SIPs); air quality analysis; aquifer evaluation; air emission inventories; toxic release inventory (TRI); geological expertise; engineering expertise; and remediation support services.

Each division is responsible for multiple program areas as described below. Additionally, each division has an administrative section responsible for ensuring programs are administered according to approved budgets, strategic and operational plans, and state and federal statutes/regulations. Each administrative section may also be responsible for oversight and coordination of special projects and/or media-based programs that have been separated into different offices/divisions based on the reorganization of DEQ.

ENVIRONMENTAL EVALUATION DIVISION

The Environmental Evaluation Division carries out numerous environmental assessment and evaluation tasks covering data inventories, data collection, data analysis and evaluation, data quality assurance and control, data validation oversight, data management, report compilation, program direction recommendations and public outreach. The administrative section is responsible for the coordination and oversight of the TMDL program across multiple divisions and offices and has primary responsibility for the quality assurance and public participation aspects of the TMDL program. The administrative section also handles the division's quality assurance for other water programs. The remaining division programs are managed in two sections and outlined below.

Data Collection and Evaluation Section

- **Air Analysis:** this group is responsible for the processing of ambient air data, performing quality control, and entering the data into state and national databases. This group is also responsible for analyzing the data to determine compliance with regulatory standards, indicators of pollution, and trends in air quality. The section also utilizes this data to support the ozone action program. It also participates in special air monitoring projects. Air Analysis has assigned QA Coordinator responsibilities to one position with a designated backup. Additionally, a position has been developed at the section level that will handle air program QA, including assisting this program with QA issues.

- **Aquifer Evaluation and Protection:** this group is charged with implementing the Wellhead Protection Program and maintaining a state database on location of community public drinking water wells and potential sources of contamination to those wells. It is responsible for implementing the Source Water Assessment Program that is designed to assess susceptibility of ground water and surface water public drinking water sources to contamination. It is also responsible for performing ambient groundwater monitoring to provide baseline data on 14 major aquifer systems statewide and collecting Global Positioning System data on contaminated groundwater areas. Also, this group coordinates with the Department of Agriculture to implement the Atrazine Cooperative Agreement. One position is designated as QA Coordinator for this program. This position has QA responsibilities described in the official job description.
- **Data Inventories and Evaluation (TRI, Emissions Inventory, and Municipal Facilities Evaluation):** this group is responsible for maintaining and managing the agency's air emissions inventory and toxic release inventory systems. Additionally, this group is tasked with performing environmental assessment reviews for potential loan projects resulting from the Municipal Facilities Revolving Loan Fund program and preparing the associated environmental assessment reports and "findings of no significant impact" (FONSI) reports. This group was formerly three different groups under the interim re-engineered agency. Therefore, there are three positions that were designated as QA coordinators and each has received QA training. It is likely this group will ultimately have one position assigned QA responsibilities.

Watershed Surveys Section

- **Level 1 & 2 Surveys (two units):** These survey groups are responsible for performing research and field surveys to acquire information on watersheds not supporting water quality standards and listed for TMDL development. These units coordinate with both the Environmental Planning Division and Environmental Technology Division to determine types of surveys and any additional survey requirements. Level 1 surveys require limited data collection, relatively small survey crews, and usually only require one or two site visits in a short time period to characterize the watershed properly. Level 2 surveys require extensive and difficult data collection, relatively large survey crews, and may require multiple site visits over an extended period of time to characterize the watershed properly. One QA Coordinator has been selected from these two units.
- **Logistics and Procedures:** Primarily one Environmental Scientist Staff position coordinating with the two survey units handles these responsibilities. This position performs research to acquire information on equipment, methods and supplies

needed to support the watershed surveys and improve efficiency in performing surveys and quality of data produced. This position also coordinates the development and updates of standard operating procedures and QA documents, participates in training employees and ensures equipment is properly maintained and available for surveys.

ENVIRONMENTAL PLANNING DIVISION

The Environmental Planning Division (EPD) is involved with long term planning of environmental issues. The division coordinates the planning activities on how the state will achieve full compliance with applicable air and water quality standards. This involves development and implementation of strategies and regulations. Sampling data is collected and assessed yielding indications of effectiveness. Strategic Planning, Operational Planning and Regulation Development activities are also coordinated from the Planning Division. The EPD's programs are managed in two sections:

Environmental Planning Section

- **Regulation Development:** this program is responsible for the efforts concerning proposed rules, final rules, rule hearings, and rule comments. This group also handles DEQ regulations, environmental regulatory code documents, and the hazardous waste authorization program. One QA Coordinator has been designated for this group.
- **Planning:** this group is responsible for the formulation and submittal of the department's Strategic Plan, Operational Plans and for the air quality planning efforts. Air quality planning includes the vehicle emissions testing program and the state implementation plans (SIPs) which cover transportation conformity, general conformity, status non-attainment areas, and air quality status. This group was formerly three different groups under the interim re-engineered agency. Therefore, there are three positions that were designated as QA coordinators and each have received QA training. It is likely that this group will ultimately have one position assigned QA responsibilities.

Standards and Assessment Section

- **Standards and Assessment:** this group is responsible for water quality standards implementation, priority water body lists, assessing water quality data and water quality status, reporting and planning efforts, and drafting regulations. This group was formerly two groups under the interim re-engineered agency. Therefore, there are two positions that were assigned QA responsibilities. It is likely that this group will eventually only have one position assigned QA responsibilities. Additionally, many of the employees in this group are project managers for environmental data

projects and have, or are expected to, receive QA training.

- **Non-point Source:** this group is responsible for implementing the state's water non-point source pollution program to reduce pollution runoff from various land types such as urban, agricultural and forested areas. The group provides oversight of grants for data collection and analysis, outreach activities, and development of watershed action plans. The non-point source program is also active in the TMDL development process and. One position has been assigned as the QA coordinator and has received training; however, almost all employees in this group are project managers for environmental data projects and all have, or are expected to, receive QA training.

ENVIRONMENTAL TECHNOLOGY DIVISION

The Environmental Technology Division is responsible for providing technical assistance to various programs throughout the office and agency. There are three primary program areas including engineering, geology, and toxicology. The following outlines how each of the 3 main program areas is further divided:

Engineering Sections

There are five engineering groups within the Environmental Technology Division. Although the agency reorganized along functional programs (permitting, surveillance, enforcement, etc.) rather than media programs, these groupings are still based on media programs. Because each engineering group has distinct functions, a QA Coordinator has been designated within each group.

- **Engineering Group 1:** this group is responsible for Urban Airshed modeling, and providing air quality engineering support for the department. This group is also involved in the development of State Implementation Plans (SIPs) and NSPS/NESHAP delegation. And, lastly, this group is tasked with addressing stack test issues and providing regulatory interpretation regarding air regulations.
- **Engineering Group 2:** this group is charged with developing Total Maximum Daily Load (TMDL). This section performs this function via teamwork with the Environmental Planning and Environmental Evaluation Division. Engineering Group 2 is also responsible for providing water quality engineering support for the department.
- **Engineering Group 3:** this group is responsible for providing engineering review for RCRA permits, witnessing trial burns, and inspections of Continuous Emission Monitoring systems. It also provides hazardous waste tank and ancillary equipment specifications and calculates specifications for secondary tanks and

containment areas.

- **Engineering Group 4:** this group is responsible for the technical review and approval of all solid waste permits as well as providing solid waste engineering support throughout the department. The group is also charged with review of pilot studies for beneficial re-use of solid wastes, engineering applications of tire chips, and answering general questions about sewage sludge.
- **Engineering Group 5:** this group is charged with providing engineering review of all projects submitted to the department as a result of the Municipal Facilities, Revolving Loan Fund program. This includes planning and design review, phase inspections, and oversight during the construction phase.

Geology Sections

The geology groups function differently than the engineering groups. Each geology group is responsible for similar functions; however, the three groups are responsible for different geographic areas of the state. Each group is responsible for two of the six regions defined by the agency. Geology Group 1 is responsible for the Northeast and Southeast Regions. Geology Group 2 is responsible for the Southwest and Acadiana Regions. Geology Group 3 is responsible for Capitol and Northwest. These geology groups coordinate with the three remediation groups outlined below under Remediation Services Division.

Responsibilities for the geology groups include processing and reviewing groundwater certifications, providing technical review of groundwater and other permits, acting as team leader and/or team support on remediation projects, responding to citizens complaints regarding groundwater issues, and performing inspections of ground water monitoring. One position has been designated as QA Coordinator for all three sections.

Toxicology Section

This group is tasked with providing toxicological support to the Permits Division, reviewing risk assessments, performing Risk Evaluation / Corrective Action Program (RECAP) reviews, and participating in the department wide development of risk based standards.

REMEDIATION SERVICES DIVISION

Remediation Services Division is responsible for implementing the agency's re-defined remediation process that includes six sub-processes: discovery, triage, investigation, remediation, monitoring and completion. Site work within the Remediation Services Division is prioritized based on risk to human health and the environment, on the

availability of funding sources, and on a first-come, first-serve basis.

The division is managed in four sections: three remediation sections and one support group. Each of the remediation groups is responsible for two of the six regions defined by the agency. Remediation Group 1 is responsible for the Northeast and Southeast Regions. Remediation Group 2 is responsible for the Southwest and Acadiana Regions. Remediation Group 3 is responsible for Capitol and Northwest. These remediation groups coordinate with the three remediation groups outlined above for the Geology sections.

Remediation Sections

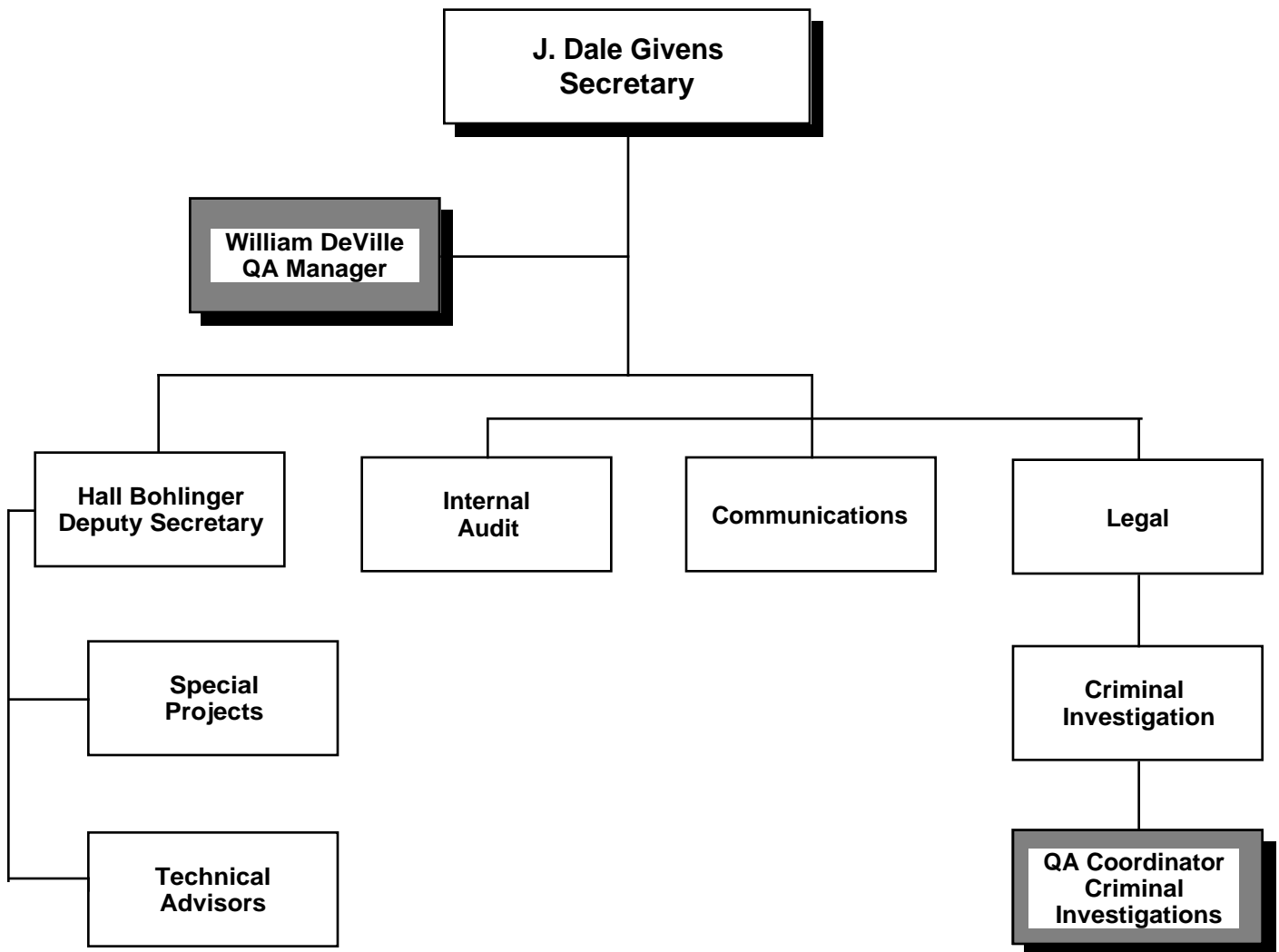
The Remediation sections are responsible for providing oversight for all remediation projects. Responsibilities of staff include serving as team leader and/or team support on projects involving remediation of soil and/or groundwater. The project team leader is the single point-of-contact for the regulated community and the general public.

Support Section

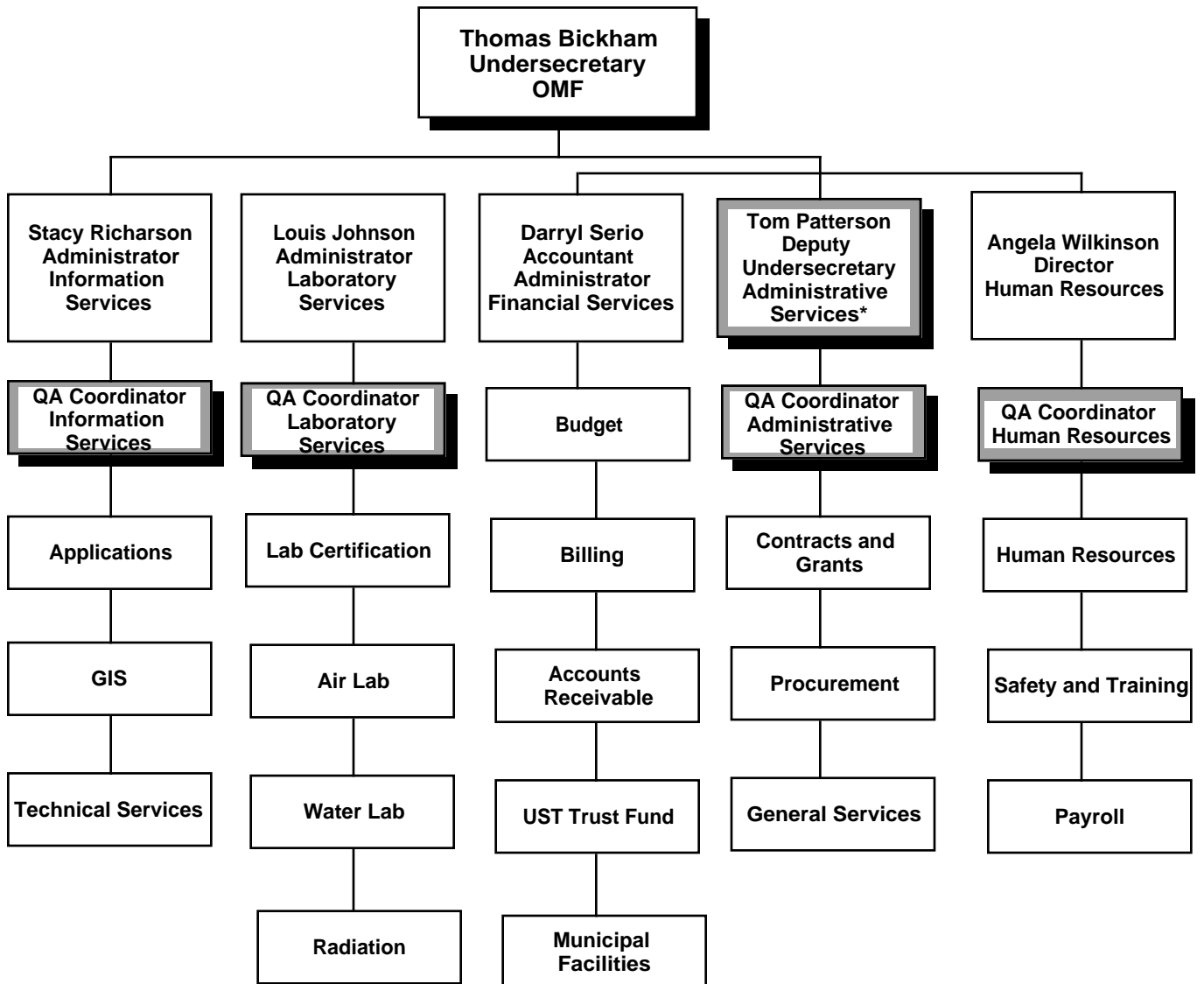
The Support Section of the Remediation Services Division is responsible for grants management, contracts assistance, remediation database management, information management, quality assurance, cost documentation, cost recovery, and other administrative support functions for the division. There is one QA Coordinator designated for the entire division; it is located in the support section.

APPENDIX B:
OFFICE ORGANIZATIONAL CHARTS – QUALITY ASSURANCE STAFF

**LDEQ Office of the Secretary
Quality Assurance Staff**

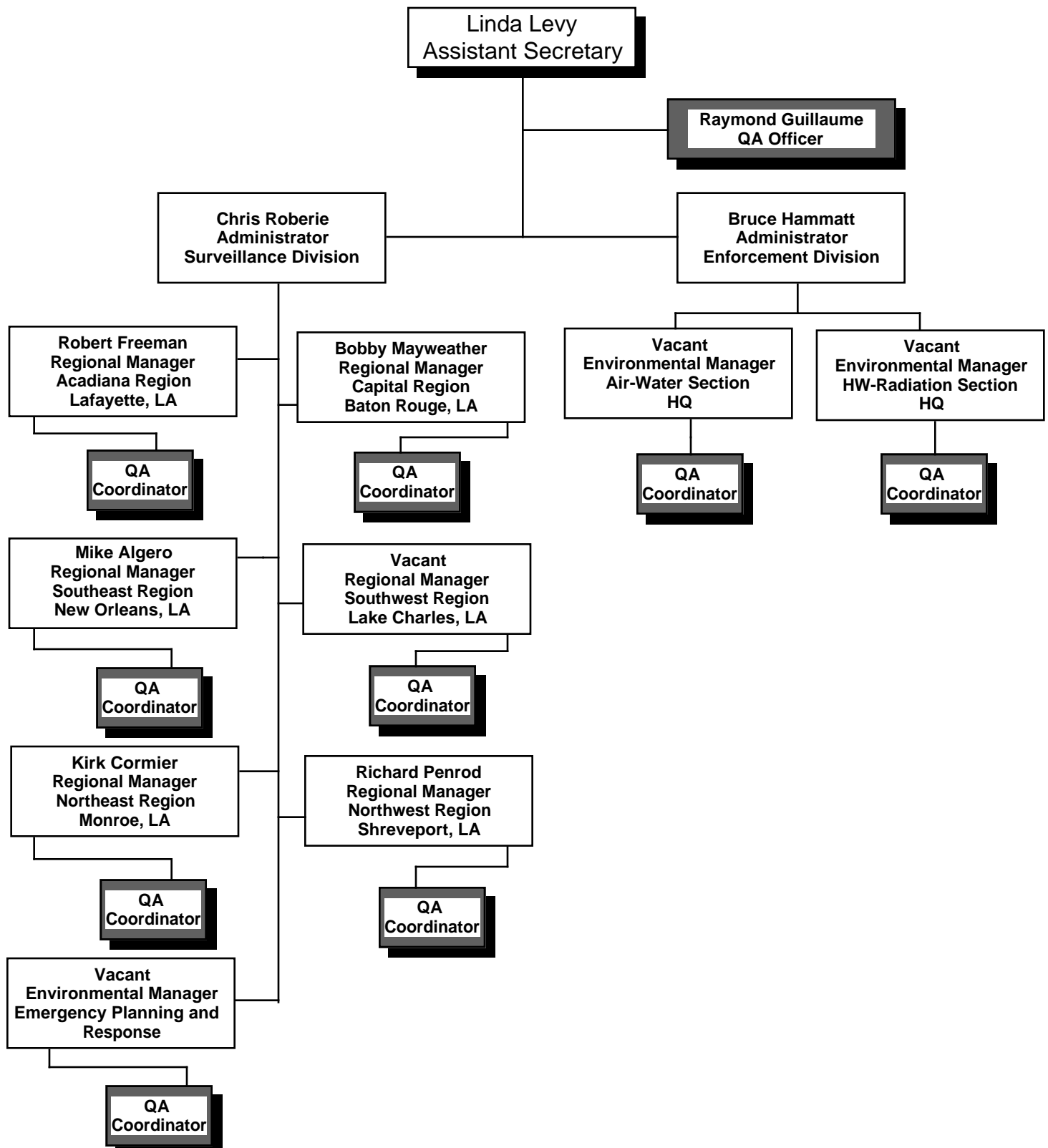


**LDEQ Office of Management and Finance
Quality Assurance Staff**

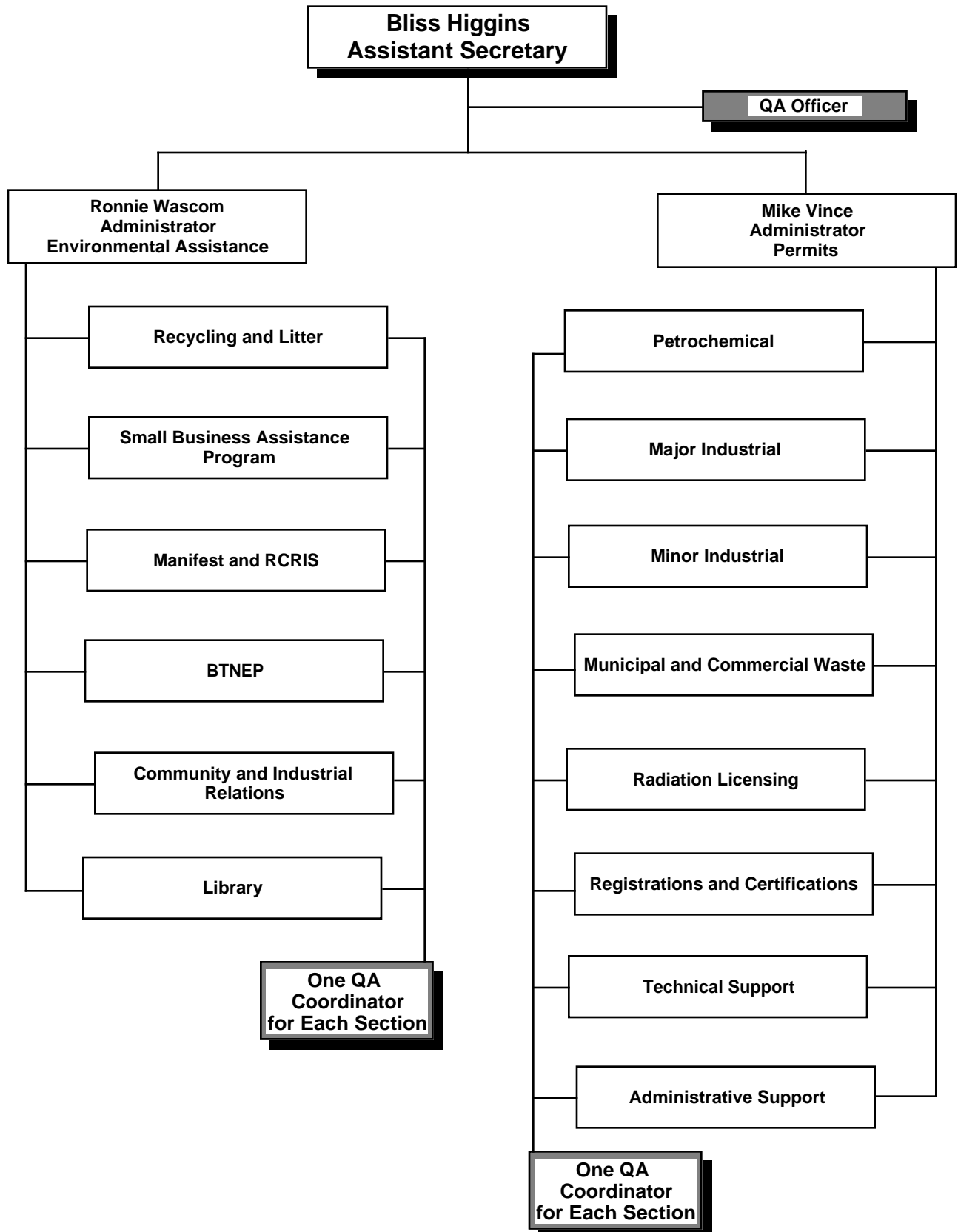


* Also serves as Quality Assurance Officer

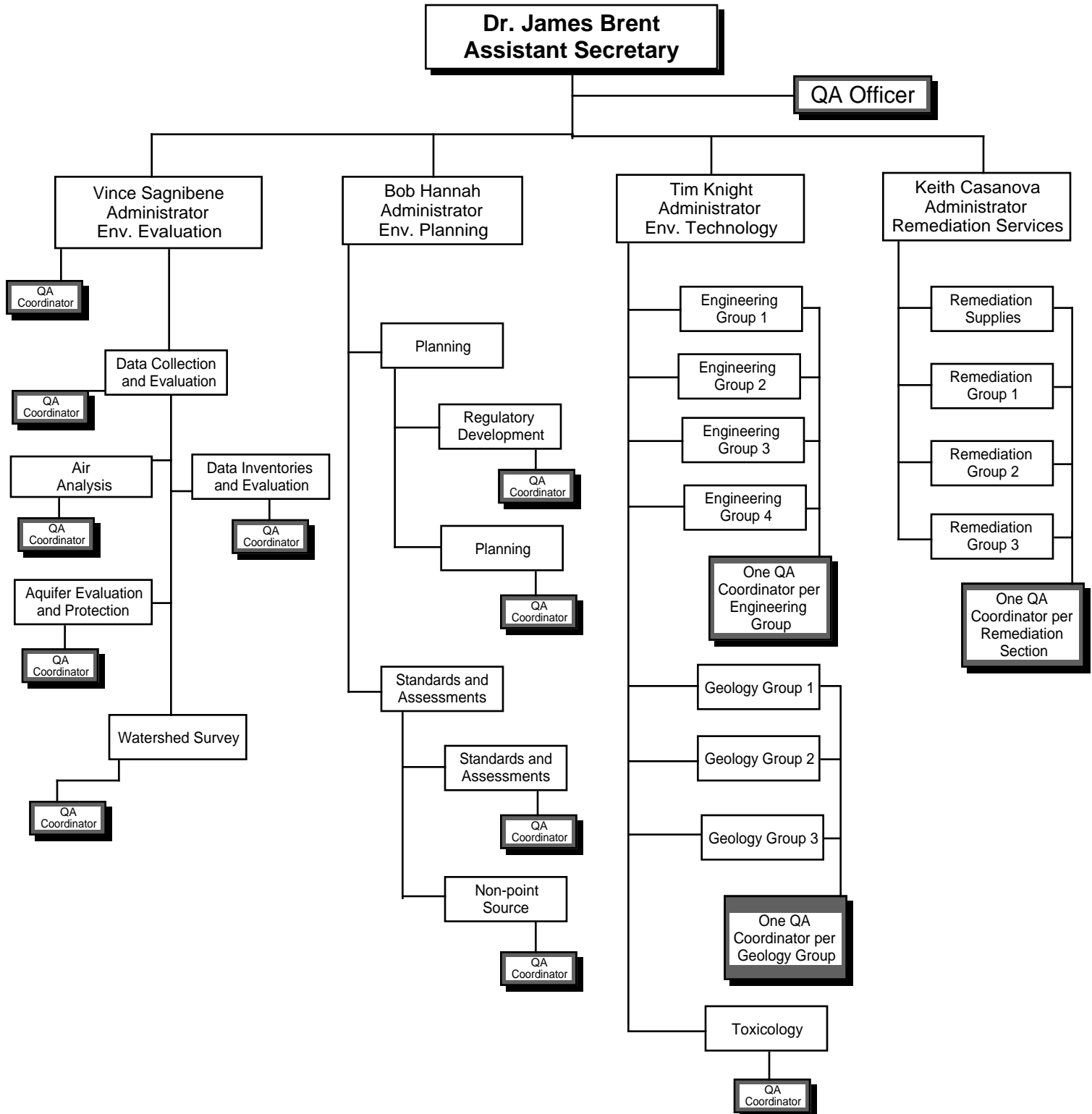
**LDEQ Office of Environmental Compliance
Quality Assurance Staff**



**LDEQ Office of Environmental Services
Quality Assurance Staff**



LDEQ Office of Environmental Assessment Quality Assurance Staff



Appendix C

Personnel Responsibilities

APPENDIX C

PERSONNEL RESPONSIBILITIES

C.1 LDEQ PERSONNEL

All agency personnel are responsible for ensuring that items and services associated with environmental programs within their areas of responsibility meet the needs and expectations of the customer and for implementing elements of the agency quality system. Individuals responsible for establishing or executing elements of the quality system may delegate portions of the work but will retain responsibility for the accomplishment of such work. Managers, supervisors, and other personnel shall, as appropriate, review and respond to any deficiencies, nonconformances, findings, or significant conditions related to their areas of responsibility. All personnel are responsible for discharging their duties in accordance with applicable plans and procedures.

C.2 SECRETARY

The Secretary is responsible for directing LDEQ programs and operations, including the LDEQ quality system. The Secretary reports to the Governor.

C.3 EXECUTIVE STAFF

The Executive Staff, which includes the Deputy Secretary, the Undersecretary, and the Assistant Secretaries, are responsible for planning, monitoring, evaluating, and improving environmental programs performed by, and quality systems implemented through, their respective offices. They are also responsible for ensuring that environmental programs produce the type and quality of results expected. The Executive Staff reports to the Secretary.

C.4 DIVISION ADMINISTRATORS

Division Administrators are responsible for planning, monitoring, executing, evaluating, and improving environmental programs performed by, and quality systems implemented through, their respective divisions. Division Administrators ensure that environmental programs (and associated work activities) performed within their organizations produce the type and quality of results expected. Division Administrators report to Assistant Secretaries or the Undersecretary.

C.5 QUALITY ASSURANCE MANAGER

The quality assurance manager reports to the Secretary and is responsible for coordinating the development and implementation of the LDEQ quality assurance program.

The quality assurance manager shall:

- coordinate the development, review, approval, and implementation of the agency QMP and agency-wide quality assurance procedures;
- coordinate with EPA Region 6 the approval of any exceptions to requirements contained in the agency QMP and agency-wide quality assurance procedures;
- maintain official copies of approved agency-wide quality assurance procedures;
- monitor the development and implementation of QAPPs, and corrective actions resulting from assessment activities;
- oversee the development and/or implementation of training and certification programs for the quality assurance officers, quality assurance coordinators, and quality assurance audit teams (including management systems reviewers);
- oversees management systems reviews and other management or technical assessment activities, as appropriate;
- organizes and directs the Quality Assurance Team;
- maintain a close liaison with the quality assurance staff of federal oversight agencies;
- provides assistance in the area of quality assurance to agency management, project managers, quality assurance staff, regulated entities, contractors and the public; and encourages the continuous development and awareness of quality assurance within the LDEQ.

C.6 QUALITY ASSURANCE OFFICERS

The quality assurance officers report to the Undersecretary or the Assistant Secretary and serve as the principal quality assurance staff in each Office. They represent their respective offices as a member of the DEQ Quality Assurance Team (QAT) under the direction and guidance of the QAM. They perform the following quality assurance and quality control tasks:

- oversee the development, approval, implementation, and maintenance of written quality assurance documents (e.g., SOPs, QAPPs);

- assist Environmental Managers, Environmental Supervisors, QA coordinators and project managers in developing and implementing quality systems;
- prepare and distribute annual assessment (MSRs, QSAs, TSAs) plans;
- determine the team leader for assessments;
- in the event of a nonconformity with the QMP the QAO will recommend to division administrators and the assistant secretaries, that work be stopped or redirected in order to safeguard programmatic objectives, worker safety, public health, or environmental protection;
- work with the QA coordinators and project managers, as necessary, to identify quality-related problems and ensure timely and effective corrective action;
- concur with proposed corrective actions and verifications;
- receive and maintain assessment records;
- monitor the implementation of corrective actions both internally and for contractors;
- coordinate the identification, disposition, and reporting to management of nonconforming items and activities;
- identify positive and adverse trends in program quality systems;
- report on the status of corrective action programs;
- provide technical expertise and/or consultation on quality services;
- coordinate quality training;
- participate in data quality assessments;
- serve as quality system representatives on special forums and committees;
- assess the effectiveness of program quality systems; and
- prepare and forward annual quality assurance reports to the quality assurance manager and assistant secretary.

C.7 QUALITY ASSURANCE COORDINATORS

Quality assurance coordinators (QACs) serve as the section/unit contact on all quality assurance matters and assist the supervisors, project managers and QA officer with planning, monitoring, evaluating and improving the quality assurance system within the respective sections/units. QACs are selected by the QAO with concurrence from the supervisors and/or Administrator. QA coordinators perform the following tasks:

- prepare and revise and/or coordinate QAPPs, specific project plans, and SOPs as necessary to ensure that current and complete documentation of quality assurance activities is incorporated in each environmentally related measurement

activity of the section/unit. Consult with the QA officer in these matters as needed.

- review quality assurance activities within the section to ensure that data of known quality and integrity are produced by the section that comply with the decision makers data quality needs
- document areas where there may be problems in maintenance of quality data;
- track quality assurance activities (audits, corrective actions and reports) as assigned in specific QAPPs. Consult with the QA Officer, supervisors and project managers as needed to resolve corrective actions and audit results
- assist QA officers with quality training; and
- Serve as representatives on office quality assurance teams for audits, technical assessments, MSRs, readiness reviews and data quality audits, as needed.

C.8 SUPERVISORS: Environmental Managers and Environmental Supervisors

Environmental Managers and Environmental Supervisors, herein referred to as Supervisors, are responsible for planning, monitoring, executing, evaluating, and improving environmental programs performed by, and quality systems implemented in, their respective sections/units. These supervisors serve as the principal management staff whose function is to ensure that programmatic activities (such as inspections, permits, enforcement actions, remediation) are carried out in accordance with state and federal requirements. Supervisors are responsible for ensuring that environmental activities within their areas of responsibility are performed in accordance with applicable plans and procedures, work performance is measured against specifications, and appropriate management oversight and inspection is accomplished. Environmental Managers report to Division Administrators; Environmental Supervisors report to Environmental Managers or Division Administrators. These Supervisors perform or assist with the following QA/QC tasks:

- maintain a thorough knowledge of work activities, commitments, deliverables, and time lines associated with their respective sections/units;
- assist and provide support to the QAO and QACs in the development and implementation of QA/QC procedures for the section/unit;
- review and approve or concur with QA documents and SOPs generated within the section/unit, as appropriate;
- review the data produced by the section/unit related to environmental measurement activities to determine if it is adequate, of known quality, and can be assessed to determine if it is acceptable for its intended use by the program;
- ensure that necessary corrective actions are carried out in a timely manner to minimize data loss.

C.9 PROJECT MANAGERS

Project managers are assigned to manage environmental projects, including work performed by contractors, to their conclusion and are accountable for the successful completion of project-related tasks and objectives. Project managers are selected by supervisors or administrators. Project managers perform the following tasks:

- maintain a thorough knowledge of work activities, commitments, deliverables, and time lines associated with projects;
- develop necessary lines of communication and good working relationships between division staff and personnel of other divisions and organizations participating in a project;
- ensure the supervisors and the LDEQ/OMF grants or contracts coordinator are informed of changes, revisions, or additions to the project;
- negotiate a list of expectations with supervisors and the grant/contract coordinator to ensure a clear understanding of the factors that may affect performance;
- monitor the effectiveness of the project quality system;
- elevate QA problems and issues requiring resolution to the Division Administrator, or designee(s), and QA officer for disposition, when appropriate;
- assist in preparing contracts and intergovernmental agreements;
- ensure project contractors understand their commitment to meet deadlines and schedule commitments; and
- enforce corrective action measures to ensure contractors meet deadlines and scheduled commitments.

C.10 GRANT AND CONTRACT COORDINATORS

Grant coordinators provide oversight for federally funded grant activities and contract coordinators provide oversight for all agency-generated contracts. Grant and contract coordinators report to the Deputy Undersecretary, Office of Management and Finance.

Grant and contract coordinators perform the following tasks:

- assist in preparing contracts, grants and intergovernmental agreements;
- maintain a thorough knowledge of commitments, deliverables, regulations, policies and time frames associated with grants and contracts;
- develop necessary lines of communication and good working relationships between the agency staff and outside entities participating in a grant or contract;
- ensure the LDEQ budget coordinator is informed of changes, revisions, or additions to the contract or grant project;

- advise supervisory personnel when grant or contract timetables, tasks, and coordination procedures are not being met, as communicated by EPA or LDEQ contact persons.

C.11 ASSESSMENT TEAMS

Supervisors and QACs will assist the QAO in the selection of the members of assessment teams for the purpose of conducting technical systems assessments, MSRs, data quality audits and other types of assessments within the agency. Assessment teams may be comprised of a single individual or several individuals from other sections/units or offices. Project managers and quality assurance coordinators are, by virtue of their training, deemed to be qualified to conduct assessments. Other personnel selected by the Assistant Secretaries, Division Administrators and QA officers may be authorized to participate in assessments, provided the team leader of the assessment has had appropriate QA training.

With the concurrence of the QA officer, assessment teams shall:

- prepare and distribute assessment checklists;
- advise affected QA coordinators and project managers, the QA officer and Division Administrator of significant conditions;
- forward written copies of assessment reports to project manager(s) and their supervisors affected by an assessment, and the affected quality assurance coordinator;
- determine whether to accept proposed corrective actions.

The Assessment team leaders shall:

- brief members on their roles and responsibilities;
- direct assessment preparations;
- provide written notification to organizations to be assessed (announced assessments);
- direct entrance and exit meetings;
- direct the preparation of assessment reports;
- forward assessment records to the QA officer;
- monitor implementation of corrective actions;
- advise quality assurance staff and suspend assessments when assessment objectives cannot be achieved; and
- recommend follow-up assessments.

Appendix D

Preparation, Review, Approval, and Distribution of Quality Management Plans

APPENDIX D

REVIEW, APPROVAL, AND DISTRIBUTION OF QUALITY MANAGEMENT PLANS

D.1 REVIEW AND REVISIONS

LDEQ will maintain a QMP utilizing the outline found in EPA Requirements for Quality Management Plans, EPA QA/R-2, (latest version). The QMP will clearly state any interpretations, limitations, or exceptions to those requirements. The quality assurance manager shall oversee the agency QMP review and revision process.

The QMP shall be reviewed and revised with the involvement and assistance of program and quality assurance staff. EPA will be afforded an opportunity to review and comment on the agency QMP prior to its approval and implementation. Unless other arrangements have been agreed upon, reviewers will be given 30 calendar days to review the QMP.

D.2 APPROVAL

The Agency QMP shall be approved prior to implementation. The signatures of the Secretary, the Executive Staff, and the quality assurance manager as well as the EPA Region 6 Quality Assurance Officer shall document approval of the agency QMP.

D.3 LDEQ CONTRACTORS

Contractors shall be bound by requirements delineated in the LDEQ QMP to the extent these requirements pertain to the goals and objectives of their work.

D.4 DISTRIBUTION OF QMP

The quality assurance manager shall distribute copies of the approved agency QMP to the Secretary, Assistant Secretaries, and quality assurance officers as well as EPA, Region 6. The QAM will ensure that the approved QMP is available electronically to all LDEQ personnel and etc. The quality assurance officers will distribute copies of the agency QMP to LDEQ personnel and contractors whose work requires knowledge of and adherence to requirements and specifications contained in the document.

D.5 MAINTENANCE OF QMPs

The quality assurance manager shall maintain an up-to-date approved copy of the current QMP.

D.6 QMP REVISIONS

The QMP shall be reissued annually according to the following schedule or revised and reissued within 120 days of significant changes or reorganizations, whichever is sooner.

If the entire QMP is current, valid, and accurately reflects the agency's goals and policies, the annual reissuance may be done by a certification that the plan is current, to include a copy of new, signed approval pages for the QMP.

D.7 EXPEDITED CHANGES

Expedited changes to the current QMP may be approved to reflect changes in organization, mission, and key personnel, address deficiencies and nonconformances, improve operational efficiency, or accommodate unique and unusual circumstances. Expedited changes to the agency QMP are effective immediately upon approval of the quality assurance manager.

Expedited changes to the QMP and the reasons for the changes shall be documented. Changes shall be incorporated into the QMP during the annual revision process or within 120 days in cases of significant changes. Expedited changes to the QMP shall be distributed as described above.

Appendix E

Preparation, Review, Approval, and Distribution of Quality Assurance Project Plans

APPENDIX E

PREPARATION, REVIEW, APPROVAL, AND DISTRIBUTION OF QUALITY ASSURANCE PROJECT PLANS

Quality Assurance Project Plans (QAPPs) will be prepared for projects involving environmental work utilizing the information provided in EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations, EPA QA/R-5 and the EPA Guidance for Quality Assurance Project Plans, EPA QA/G-5 (latest versions). When DQOs are defined for specific projects, EPA's DQO guidance documents (section E.8) will be utilized.

E.1 QAPP PREPARATION AND REVIEW

QAPPs will be prepared, reviewed and approved in accordance with requirements contained in the Agency QMP.

QAPPs will be systematically prepared with the involvement and assistance of program and quality assurance staff. EPA will be afforded an opportunity to review and comment on proposed QAPPs prior to their approval and implementation. Unless other arrangements have been agreed upon, reviewers should be given a minimum of 30 calendar days in which to review QAPPs. Review comments, responses to comments, and revisions shall be documented and provided to reviewers, upon request.

E.2 APPROVAL

QAPPs shall be approved prior to the initiation of environmental work activities. At a minimum, QAPP approvals shall be documented by the signatures from appropriate project managers and QA coordinators. The Assistant Secretary, QA officer and Division Administrator may require additional approval signatures.

The LDEQ intends to minimize the number of internal approval signatures required for QAPPs. Decisions to reduce the number of approval signatures will be based on the demonstrated effectiveness of a section's quality assurance system.

In the event the EPA Project or QA Officer does not provide written approval of or comments describing deficiencies in a QAPP within 30 days, the QA Manager will notify the EPA Region 6 Quality Assurance Manager of the failure by EPA to respond in a timely manner and request the QAPP approval be expedited so that environmental work activities can proceed as planned.

E.3 LDEQ CONTRACTORS

Environmental work conducted jointly by LDEQ and contractors or conducted solely by LDEQ contractors shall be planned and documented in QAPPs. QAPPs involving contractors shall be prepared, reviewed, and approved as described above.

In addition to the approval signatures described above, QAPPs involving contractors shall, at a minimum, also be approved in writing by the contractors designated project representative and the contractors senior project quality assurance representative and by any other individuals required by the Assistant Secretary, QA officer, project manager, or QA coordinator; the contractor's designated project representative, or the contractor's senior project quality assurance representative. All projects involving EPA funds require EPA approval. Projects involving state funds do not require EPA approval.

E.4 DISTRIBUTION

Project managers or QA coordinators will distribute copies of QAPPs to the individuals listed in section A3 (Distribution List) of the documents. At a minimum, this distribution will include participating members (offices, divisions, sections, and regional offices) within LDEQ, participating contractors, and EPA. QA officers and contractor representatives shall ensure copies of QAPPs are made available electronically to personnel performing environmental activities governed by these documents.

E.5 MAINTENANCE

The quality assurance officers shall maintain an up-to-date list of all QAPPs applicable to their respective programs as well as approved copies of these documents. Project managers and QA coordinators will retain QAPPs for three years from the end of the project period, unless a longer retention period is specified in a grant, record retention schedule, or other governing document.

E.6 REVISIONS

Until environmental work is completed, QAPPs shall be revised as necessary and reissued annually on their anniversary date or revised and reissued within 120 days of significant changes, whichever is sooner. If the entire QAPP is current, valid, and accurately reflects the project goals and the organization's policy, the annual reissuance may be done by a certification that the plan is current, to include a copy of new, signed approval pages for the QAPP.

E.7 EXPEDITED REVISIONS

Expedited changes to QAPPs may be approved to reflect changes in project organization, tasks, schedules, objectives, and methods, address deficiencies and nonconformances, improve operational efficiency, and accommodate unique or unanticipated circumstances. Expedited changes are effective immediately upon approval by the quality assurance officer and the QA coordinator. Expedited changes to QAPPs and the reasons for the changes shall be documented. Changes to QAPPs shall be distributed to all individuals and organizations contained in the QAPP distribution list.

Expedited changes shall be reviewed, approved, and incorporated into a revised QAPP during the annual revision process or within 120 days of the initial approval in cases of significant changes.

E.8 REFERENCES

1. EPA Guidance for Quality Assurance Project Plans. EPA QA/G-5. EPA/600/R-98/018. February 1998.
2. EPA Requirements for Quality Assurance Project Plans. EPA QA/R-5. Interim Final. November 1999.
3. Guidance for the Data Quality Objectives Process. EPA QA/G-4. EPA/600/R-96/055. September 1994.
4. Data Quality Objectives Process for Hazardous Waste Site Investigations. EPA QA/G-4HW. EPA/600/R-00/007. January 2000.
5. Data Quality Objectives Process for Superfund. Interim Final Guidance. EPA540-R-93-071. September 1993.
6. Guidance on Technical Audits and Related Assessments for Environmental Data Operations. EPA QA/G-7. EPA/600/R-99/080. January 2000.
7. Guidance for Data Quality Assessment: Practical Methods for Data Analysis. EPA QA/G-9. EPA/600/R-96/084. January 1998.
8. USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. EPA 540/R-94/013. February 1994.
9. USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review. EPA540/R-99/008. October 1999.
10. Risk Assessment Guidance for Superfund, Human Health Evaluation Manual, Volume 1, Part A. Interim Final. EPA/540/1-89/002. December 1989.
11. Guidance on Data Usability in Risk Assessment, Part A. PB92-963356. April 1992.

Appendix F

Purchasing Policy and Procedures (PPM 2003-88)

APPENDIX F

PURCHASING POLICY AND PROCEDURES (PPM 2003-88)

POLICY NUMBER: 2003-88
SUBJECT: PURCHASING Procedures
EFFECTIVE DATE: APRIL 19, 1988
ISSUED: APRIL 19, 1988

REVISED DATE: November 29, 1999

INQUIRIES TO: Procurement Division
7290 Bluebonnet Blvd.
Baton Rouge, LA 70810
P.O. Box 82231
Baton Rouge, LA 70884
Phone: 765-0093

Issued April 19, 1998
Revised November 4, 1996;
November 29, 1999

Policy 2003-88
Page 2003.1
(29 pages)

Appendix G

List of QAPPs with Schedule for Submittals

APPENDIX G. LDEQ QMP 2000

Page 1 of 2

November 2, 2000

A. List of QAPPs Linked to Performance Partnership Grant (PPG)

QAPP Title	EPA Program	EPA Contact	LDEQ Contact	Expiration Date
Environmental Monitoring and Measurement Activities Relating to Resource Conservation and Recovery Act (OEC/OEA/OMF Lab Services)	RCRA 3011	Ann Zimmerman	Raymond Guillaume OEC/QAO	9/15/01
Underground Storage Tanks Project Plan (OEC)	SWDA 2007, 9004	Audray Lincoln	Raymond Guillaume OEC/QAO	6/23/01
Ambient Air Monitoring Project (OEC/OEA)	CAA 105	Kuenja Chung and Rexene Hanes	Stephanie Braden OEA/QAO	9/15/01
Photochemical Assessment Monitoring Stations (PAMS) and Air Toxics Sampling Network (OMF Lab Services/ OEA/OEC)	CAA 105	Kuenja Chung and Rexene Hanes	James Hazlett, Air Toxics Lab Manager	11/15/00
Emissions Inventory System Project Plan (OEA)	CAA 105	Betsy Metcalf and Rexene Hanes	Stephanie Braden OEA/QAO	3/24/01
Asbestos Demolition-Renovation Project Plan (OEC/OEA)	CAA 105	Greg Pashia and Rexene Hanes	Raymond Guillaume OEC/QAO	9/20/01
Permits Data Management Project Plan (OES)	CAA 105	Betsy Metcalf and Rexene Hanes	Nathan Levy OES/QAO	8/18/00 Revision submitted to EPA
Asbestos Data Management Project Plan (OES/OEC)	CAA 105	Betsy Metcalf and Rexene Hanes	Nathan Levy OES/QAO	6/22/01
Water Ambient Sampling Monitoring Program (OEC/OEA/ OMF Lab Services)	CWA 106	Joan Brown and Arlene Gaines	Raymond Guillaume OEC/QAO	9/11/00 Revision submitted to EPA
Aquifer Protection Baseline Monitoring Program Plan (OEA)	CWA 106	Joan Brown and Arlene Gaines	Stephanie Braden OEA/QAO	6/28/01
Dissolved Oxygen Total Maximum Daily Load Determinations - Individual plans submitted for each survey (OEA)	CWA 106	Joan Brown and Arlene Gaines	Stephanie Braden OEA/QAO	Varies

APPENDIX G. LDEQ QMP 2000

page 2 of 2

November 2, 2000

B. List of QAPPs Linked to Other Grants

Quality Assurance Project Plan	EPA Program	EPA Contact	LDEQ Contact	Expiration Date
PM 2.5 Air Monitoring Project (OEA/OEC)	CAA 103	Kuenja Chung and Rexene Hanes	Stephanie Braden OEA/QAO	8/30/01
Leaking Underground Storage Tank Program Plan (OEA)	SWDA 9003	Audray Lincoln	Stephanie Braden OEA/QAO	5/30/01
Old Inger Superfund Site Project Plan (OEA)	CERCLA 104/SARA	Bart Canellas and Don Williams	Stephanie Braden OEA/QAO	10/15/00
Asbestos OCM Project Plan (OEC/OES/Lab Services)	TSCA 404	Neil Pflum	Raymond Guillaume OEC/QAO	8/25/01
Lead-based Paint Program Project Plan (OEC/OES/Lab Services)	TSCA 402	Eva Steele	Raymond Guillaume OEC/QAO	11/15/00
Louisiana Ecoregion Project (OEA)	CWA 104	Joan Brown and Arlene Gaines	Stephanie Braden OEA/QAO	8/20/98 approved - updated as additional projects begun
Clean Metals Sampling and Analysis (OEA) (Sampling project plan being revised for submission to EPA; Analysis plan being developed by new contract Lab.)	CWA 104		Stephanie Braden OEA/QAO	sampling 7/19/00; analysis 9/13/00; updated as additional projects begun
Non-point Source Environmental Monitoring. (OEA) Individual plans submitted separately as projects are developed. Current projects include: (1) Fate of Atrazine Herbicide in Soils as Affected by Sugarcane Management Practices; (2) Technical and Hydrological Support in the Tensas Basin; (3) Rapides Area Planning Commission Home Sewage System Inspections; (4) Evaluation of Poultry Litter on Water Quality and Wood Production on Forested Lands; (5) Phase II-Non-coal Surface Mining Impacts; (6) Impact of BMPs and Organic Wastes on Water Quality and Crop Production; (7) Model sustainable farm for practical water quality management; (8) Soybean BMP Demonstration and Education Program	CWA 319	Carmen Assunto and Joan Brown	Stephanie Braden OEA/QAO	Varies